

**Industrial Hygiene Technologies, Inc.**  
Environmental & Industrial Hygiene Consultants

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 7 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 10 Feb 01	

MARK W/ X, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG

See **Asbestos Abatement Monitoring Checklist and Log of Events- Daily Log of Events** for details concerning project.

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Signature of Inspector/Project Monitor: \_\_\_\_\_


Date: 10Feb 01

Project Monitor: Ryan S. Reed  
(Print/Type)

Training Cert./ License No: 01-0104  
(Print/Type)

**ABATEMENT FINAL INSPECTION CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 7 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 10 Feb 01	

PCM SAMPLE LOG										
Microscopist: 		(sign)								
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-021001-35RR	POST	New Executive Office Building: Room 7224 Riser 65A Work Area E inside Mini-Containment	10.0	10.0	3:06 PM	5:06 PM	120	1200	5.0	<0.003
2534-021001-36RR	POST	New Executive Office Building: Room 7224 Riser 65A Work Area E inside Mini-Containment	10.0	10.0	3:06 PM	5:06 PM	120	1200	7.5	0.003
2534-021001-37RR	POST	New Executive Office Building: Room 7224 Riser 64A Work Area F inside Mini-Containment	10.0	10.0	4:18 PM	6:18 PM	120	1200	3.5	<0.003
2534-021001-38RR	POST	New Executive Office Building: Room 7224 Riser 64A Work Area F inside Mini-Containment	10.0	10.0	4:18 PM	6:18 PM	120	1200	4.0	<0.003

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Signature of Inspector/Project Monitor:  Date: 10Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

## PROJECT PROGRESS / CLOSEOUT REPORT

**Site Name:** New Executive Office Building

**Project Name:** Fan Coil Unit Replacement Project - Chilled Water / Hot Water Supply Line Access Door Installation, Asbestos Hazard Reduction

**Work Area Location:** 5<sup>th</sup> Floor 5221 - 5235, Odd Room Risers 42A to 53A, Work Areas A, B, & C

**Order Number:** P-11-01-DC-0107      **Contract Number:** GS11P00MQD0098      **ACT Number:** PO2642534

**Project Date (s):** February 16, 17, 2001

**Sampling Conducted:** Pre-abatement, Area, Work Area, Remote, and Final Clearance Monitoring - PCM Analysis (NIOSH 7400 Method)

**Project Description:** Industrial Hygiene Technologies, Inc. (IHT) was retained to conduct asbestos abatement project monitoring and design conformance control during the demolition of perimeter walls to allow for future installation of perimeter wall plumbing access doors associated with the New Executive Office Building Fan Coil Unit replacement Project.

Hillian Brothers, Inc. was retained to erect mini-negative pressure enclosures to be used in the demolition of perimeter plaster walls, cleaning of plumbing chases, and removal of asbestos TSI, as encountered. Known asbestos hazards associated with this project include over-spray / delaminated spray applied asbestos fire retardant, cementitious fittings, pipe insulation, and contaminated debris. Hillian Brothers is utilizing asbestos engineering controls to ensure demolition activities which may disturb friable asbestos materials and contaminated debris within the chases, do not contaminate adjacent office areas. When encountered, asbestos is removed using wet methods. Regardless of the existence of asbestos TSI on plumbing, each chase area is presumed to be contaminated with asbestos fire retardant, and decontaminated.

**Project Description  
Continued:**

Work began at 6:45 pm, February 16, 2001. Preparation of the work area, and pre-abatement monitoring were conducted. All work was conducted as per abatement plan, with the exception of fan coil unit decontamination. This work will take place during another phase of the project.

The following work shift began at 6:15am, February 17, 2001 and involved lock-out / tag-out of the HVAC systems, additional preparations, demolition of perimeter walls, decontamination of wall chases, and removal of cementitious fittings.

IHT conducted sampling in each of 2 mini-containments (WA B & C), full containment A, within each separate office, at AFD Exhaust, remotely within adjacent hallways, outside the work area, and on the floors above and below. The sampling plan was developed by Mark Sovich, Michael MacCabe, and Ryan Reed during a pre-work walkthrough conducted February 9, 2001. The sampling plan involves assessment of each functional area of abatement, within the control areas, staging areas, AFD exhaust, and remotely such that the "sampling train" is sufficient to rapidly assess and delineate fiber migration, should a fiber release episode occur during the operation. Immediate analysis of samples mid and end of shift is conducted to ensure safety of un-protected workers outside of the control area, and rapid response to fiber release.

Work was completed and contractors fully demobilized by 7:30 PM 02/17/01. All work was completed as per modified scope of work / abatement plan, with no elevated fiber concentrations reported outside of the control area. Final clearance was achieved within each NPE with all results reported below 0.01 F/cc.

**Deviations:**

The GSA scope of work specifies cleaning of the Fan Coil Units. This work will be conducted during a future phase of the project. Due to the size of each mini-containment, 2 final clearance samples were utilized in WA's B & C. This is a deviation from the GSA clearance protocol, but in conformance with District of Columbia Asbestos Regulation. Deviation was taken as the change was in compliance with applicable regulations, provided adequate assessment for completion, facilitated timely project completion, and provided significant overall cost savings for the client.

**Asbestos Removed:**

Overspray and fire retardant debris was removed from each wall penetration. Each of 22 pipe chase penetrations, and 3 NPE's were fully decontaminated and encapsulated. A total of 13 cementitious fittings were removed.



**PRE-ABATEMENT CHECKLIST & LOG**

<b>CLIENT: GSA, NCR, SDS, WPYG</b>	<b>ORDER NUMBER: P-11-01-DC-0101</b>	<b>CONTRACT NUMBER: GS11P00MQD0098</b>	<b>ACT NUMBER: PO2642534</b>
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 16 Feb 01	

<b>REMOVAL CONTRACTOR:</b> Hillian Brothers	<b>MONITORING CONTRACTOR:</b> INDUSTRIAL HYGIENE TECHNOLOGIES, INC.
<b>CONTRACTOR SUPERVISOR:</b> Juan A. Giron	

<b>TIME START:</b> 1845	<b>TIME COMPLETE:</b> 2215
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**ABATEMENT SCOPE OF WORK:** Prep work for Class I removal operations

<b>TYPE OF ASBESTOS MATERIAL TO BE ABATED</b>	<b>Category 1 Friable</b>	<b>QTY. OF ASBESTOS MATERIAL TO BE ABATED</b>	Unknown
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<b>OSHA ACTIVITY CLASSIFICATION</b>	<b>CLASS I</b>	<b>X</b>	<b>CLASS II</b>		<b>CLASS III</b>		<b>CLASS IV</b>	
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<b>INSPECTION CATEGORY</b>	<b>ACTIVITY TO BE CHECKED</b>	<b>WITHIN LIMITS</b>	<b>DEVIATION</b>
<b>WORK SITE ISOLATION</b>	BARRIER TAPE TO ISOLATE STAGING AREA AND DECON		X- Prep Work
	FULL CONTAINMENT		X- Prep Work
	NEGATIVE PRESSURE -0.02 MINIMUM		X- Prep Work
	FOUR AIR CHANGES PER HOUR		X- Prep Work
	CRITICAL BARRIERS INTACT (DUCTS, WINDOWS, DOORS, ALL PENETRATIONS)		X- Prep Work
	FLOOR COVERED		X- Prep Work
	WALLS COVERED		X- Prep Work
	AREA VENTILATION OFF & VENTS COVERED		X- Prep Work
	GLOVEBAGS SMOKE TESTED AND FOUND SATISFACTORY		X- Prep Work
<b>SIGNAGE</b>	CAUTION SIGNS AT STAGING AREA		X- Prep Work
	OSHA SIGN (ASBESTOS) AT ENTRANCES TO WORK AREA		X- Prep Work
	WASTE CONTAINERS LABELED PER NESHAP & GENERATOR		X- Prep Work
	HVAC SYSTEM TAGGED OUT		X- Prep Work
	NO SMOKING, EATING OR DRINKING IN THE WORK AREA		X- Prep Work

MARK W/ X, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG


Signature of Inspector/Project Monitor: AM FOR RSR Date: 16 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**PRE-ABATEMENT CHECKLIST & LOG**

<b>CLIENT: GSA, NCR, SDS, WPYG</b>	<b>ORDER NUMBER: P-11-01-DC-0101</b>	<b>CONTRACT NUMBER: GS11P00MQD0098</b>	<b>ACT NUMBER: PO2642534</b>
<b>BUILDING: New Executive Office Bldg:</b>		<b>LOCATION: 725 17<sup>TH</sup> Street NW. Washington, DC</b>	
<b>PROJECT: 5<sup>TH</sup> Floor Fan Coil Unit Replacement Project</b>		<b>DATE: 16 Feb 01</b>	

INSPECTION CATEGORY	ACTIVITY TO BE CHECKED	WITHIN LIMITS	DEVIATION
<b>INSPECTION</b>	HIGH-SPEED ABRASIVE DISC SAWS, COMPRESSED AIR, DRY SWEEPING, SHOVELING, EMPLOYEE ROTATION - NOT TO BE USED		X- Prep Work
	LABELED WASTE CONTAINERS ON SITE		X- Prep Work
	HEPA VACUUM FOUND WORKING AND ACCEPTABLE		X- Prep Work
	ACCESS TO WATER FOR WET METHODS		X- Prep Work
	AIRLESS SPRAYER WORKING AND IN WORK AREA		X- Prep Work
<b>WORKER PROTECTION</b>	DISPOSABLE COVERALLS & BOOT COVERS		X- Prep Work
	PROPER NIOSH RESPIRATORS TYPE RESPIRATOR: _____ FILTER: _____		X- Prep Work
	HEAD PROTECTION		X- Prep Work
	EYE PROTECTION		X- Prep Work
<b>SHOWERS</b>	FUNCTIONING		X- Prep Work
	HOT AND COLD RUNNING WATER		X- Prep Work
	WATER COLLECTION / FILTERING DEVICE FUNCTIONAL		X- Prep Work
<b>WORK HABITS</b>	HOUSE KEEPING - MATERIALS AND EQUIPMENT STORED. LOCKERS AND PERSONAL ITEM CONTAINERS	X	
<b>SAFETY MEETING</b>	COMPETENT PERSON HAS CONDUCTED A SAFETY MEETING	X	
<b>BASELINE MONITORING</b>	BASELINE MONITORING CONDUCTED PRIOR TO START OF PREPARATIONS	X	
<b>PROJECT DESIGN</b>	PROJECT DESIGN ON SITE, AND ALL PREPARATIONS COMPLETED IN ACCORDANCE WITH DESIGN	X	
<b>DOCUMENTS</b>	NOTIFICATION, PERMIT, ABATEMENT PLAN, CONTRACTOR LICENSE, SUPERVISOR LICENSE, WORKER LICENSE, TRAINING, & MEDICAL, FIT TEST DOCUMENTATION ON SITE AND IN ORDER	X	
MARK W/ X, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG			

Signature of Inspector/Project Monitor:  Date: 16 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**PRE-ABATEMENT CHECKLIST & LOG**

<b>CLIENT: GSA, NCR, SDS, WPYG</b>	<b>ORDER NUMBER: P-11-01-DC-0101</b>	<b>CONTRACT NUMBER: GS11P00MQD0098</b>	<b>ACT NUMBER: PO2642534</b>
<b>BUILDING: New Executive Office Bldg:</b>		<b>LOCATION: 725 17<sup>TH</sup> Street NW, Washington, DC</b>	
<b>PROJECT: 5<sup>TH</sup> Floor Fan Coil Unit Replacement Project</b>		<b>DATE: 16 Feb 01</b>	

**DAILY LOG OF EVENTS**

**Remediation Activities**

1845: Hillian on site New Executive Office Building 725 17<sup>TH</sup> Street NW Washington DC . Juan A Giron, Hillian superintendent informs IHT that Hillian shall be commencing prepwork for ACM Class I removal operations using Mini-Containments, hand tools, and wet methods. These removal activities are to occur in 5<sup>TH</sup> Floor 5221 - 5235 Odd Rooms Risers 42A to 53A Mini-Containment Work Area's A, B, & C.

1935: Hillian workers mobilize and commence prepwork in 5<sup>TH</sup> Floor 5221 - 5235 Odd Rooms Risers 42A to 53A Mini-Containment Work Area's A, B, & C.

2145: Hillian workers halt prep work operations. Hillian to return to site tomorrow 2/17/01 @ 6:30AM to continue prepwork operations and commence demolition and decontamination with potential TSI fitting removal.

2200: Hillian departed the site.

**Sampling**

1830: IHT on site to perform area air monitoring and abatement quality control.

1920: IHT began sampling.

2200: IHT completed sampling. IHT off site.

**Inspections**

No inspections necessary.

**Comments**

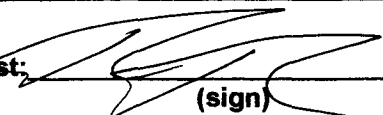
Hillian Prepwork operations proceeded without incident.

PCM pre abatement air sample analysis performed: IHT reported no elevated sample results: All area samples reported airborne fiber concentration levels below 0.01 fibers/cc. Deemed Satisfactory.

Signature of Inspector/Project Monitor:  Date: 16 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
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<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 16 Feb 01	

PCM SAMPLE LOG										
Microscopist: 		(sign)								
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-021601-01RR	PRE	New Executive Office Building: Hall adj to Room 5218	10.0	10.0	7:28 PM	9:34 PM	126	1260	13.5	0.005
2534-021601-02RR	PRE	New Executive Office Building: Hall adj to Room 5236	10.0	10.0	7:31 PM	9:36 PM	125	1250	12.5	0.005
2534-021601-03RR	PRE	New Executive Office Building: Room 5221 adj to Riser 43A Work Area A	10.0	10.0	7:22 PM	9:27 PM	125	1250	18.0	0.007
2534-021601-04RR	PRE	New Executive Office Building: Room 5221 adj to Riser 44A Work Area A	10.0	10.0	7:22 PM	9:27 PM	125	1250	15.0	0.006
2534-021601-05RR	PRE	New Executive Office Building: Room 5233 adj to Riser 47A Work Area A	10.0	10.0	7:35 PM	9:37 PM	122	1220	14.0	0.006


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**PRE-ABATEMENT CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 16 Feb 01	

PCM SAMPLE LOG										
Microscopist: 										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-021601-06RR	PRE	New Executive Office Building: Room 5233 adj to Riser 48A Work Area A	10.0	10.0	7:35 PM	9:37 PM	122	1220	14.5	0.006
2534-021601-07RR	PRE	New Executive Office Building: Room 5235 adj to Riser 50A Work Area B	10.0	10.0	7:42 PM	9:43 PM	121	1210	15.0	0.006
2534-021601-08RR	PRE	New Executive Office Building: Room 5235 adj to Riser 51A Work Area B	10.0	10.0	7:42 PM	9:43 PM	121	1210	17.5	0.007
2534-021601-09RR	PRE	New Executive Office Building: Room 5235 adj to Riser 50A Work Area B	10.0	10.0	7:38 PM	9:39 PM	121	1210	20.0	0.008


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**PRE-ABATEMENT CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 16 Feb 01	

<b>PCM SAMPLE LOG</b>										
<b>Microscopist:</b>  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-021601-10RR	PRE	New Executive Office Building: Room 5235 adj to Riser 50A Work Area B	10.0	10.0	7:38 PM	9:39 PM	121	1210	21.5	0.009

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Signature of Inspector/Project Monitor:  Date: 16 Feb 01

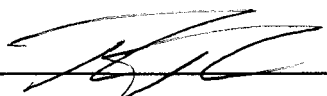
Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

### GSA ABATEMENT PERSONNEL REPORT

<b>BUILDING:</b> New Executive Office Building		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 16 February 01	
<b>REMOVAL CONTRACTOR:</b> Hillian Brothers		<b>MONITORING CONTRACTOR:</b> INDUSTRIAL HYGIENE TECHNOLOGIES, INC	
<b>SHIFT START TIME:</b> 1845		<b>SHIFT COMPLETION TIME:</b> 2215	
<b>SCOPE OF WORK</b>			
<b>ASBESTOS WORK:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project Prep Work & PCM Pre-Sampling			
ASBESTOS CLASS I	ASBESTOS CLASS II	ASBESTOS CLASS III	ASBESTOS CLASS IV
NEA OBTAINED	NEA OBTAINED	NEA OBTAINED	NEA OBTAINED
<b>LEAD WORK:</b> N/A			
LEAD ABATEMENT	LEAD DEMOLITION	INTACT ITEMS	STRIPPING
NEG. INIT. DETERM.	NEG. INIT. DETERM.	NEG. INIT. DETERM.	NEG. INIT. DETERM.

PERSONAL INFORMATION			
NAME: (LAST, FIRST, MI - PRINT)	SOCIAL SECURITY NO.	MEDICALS / FIT TESTS ON SITE <small>CONCENTRA MEDICAL CENTER</small>	STATE LICENSE NO. / TYPE (TRAINING CERT. NO)
<del>JOHN A. STROM</del>			
JUAN A. GIRON	578-23-5460		
SILVIA FLORES	578-21-0278		
NELSON ORELLANA	578-25-4445		
JORGE A. PORTILLO	216-43-9208		
RUFINO FLORES	214-19-2209		
ODIASA FLORES	<del>230-59-6192</del> 578-25-4445		
PORFIRIO M. VELASQUEZ	230-85-9417		
LUIS CHIRINO	243-54-0923		
ELSIRA REYES	606-58-9796		

Page 1 of 1

Signature of Inspector/Project Monitor:  Date: 16 FEB 01

Project Monitor: RYAN S. REED Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

## PRE-ABATEMENT CHECKLIST & LOG

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
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<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 17 Feb 01	

<b>REMOVAL CONTRACTOR:</b> Hillian	<b>MONITORING CONTRACTOR:</b>
<b>CONTRACTOR SUPERVISOR:</b> Juan A. Giron	INDUSTRIAL HYGIENE TECHNOLOGIES, INC.
	<b>TIME START:</b> 0630 <b>TIME COMPLETE:</b> 1830


**ABATEMENT SCOPE OF WORK:** Prep work for potential Class I removal operations

<b>TYPE OF ASBESTOS MATERIAL TO BE ABATED</b>	Category 1 Friable	<b>QTY. OF ASBESTOS MATERIAL TO BE ABATED</b>	Unknown
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<b>OSHA ACTIVITY CLASSIFICATION</b>	<b>CLASS I</b>	<input checked="" type="checkbox"/>	<b>CLASS II</b>	<input type="checkbox"/>	<b>CLASS III</b>	<input checked="" type="checkbox"/>	<b>CLASS IV</b>	<input type="checkbox"/>
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INSPECTION CATEGORY	ACTIVITY TO BE CHECKED	WITHIN LIMITS	DEVIATION
<b>WORK SITE ISOLATION</b>	BARRIER TAPE TO ISOLATE STAGING AREA AND DECON	N/A	
	FULL CONTAINMENT	MINI	
	NEGATIVE PRESSURE -0.02 MINIMUM	X	
	FOUR AIR CHANGES PER HOUR	X	
	CRITICAL BARRIERS INTACT (DUCTS, WINDOWS, DOORS, ALL PENETRATIONS)	X	
	FLOOR COVERED	X	
	WALLS COVERED	X	
	AREA VENTILATION OFF & VENTS COVERED	X	
	GLOVEBAGS SMOKE TESTED AND FOUND SATISFACTORY	N/A	
<b>SIGNAGE</b>	CAUTION SIGNS AT STAGING AREA	X	
	OSHA SIGN (ASBESTOS) AT ENTRANCES TO WORK AREA	X	
	WASTE CONTAINERS LABELED PER NESHAP & GENERATOR	X	
	HVAC SYSTEM TAGGED OUT	X	
	NO SMOKING, EATING OR DRINKING IN THE WORK AREA	X	

MARK W/ X, MARK NA IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG

Signature of Inspector/Project Monitor:  Date: 17 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104

(Print/Type) (Print/Type)



**Industrial Hygiene Technologies, Inc.**  
Environmental & Industrial Hygiene Consultants

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<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 17 Feb 01	

INSPECTION CATEGORY	ACTIVITY TO BE CHECKED	WITHIN LIMITS	DEVIATION
INSPECTION	HIGH-SPEED ABRASIVE DISC SAWS, COMPRESSED AIR, DRY SWEEPING, SHOVELING, EMPLOYEE ROTATION - NOT TO BE USED	X	
	LABELED WASTE CONTAINERS ON SITE	X	
	HEPA VACUUM FOUND WORKING AND ACCEPTABLE	X	
	ACCESS TO WATER FOR WET METHODS	X	
	AIRLESS SPRAYER WORKING AND IN WORK AREA	X	
WORKER PROTECTION	DISPOSABLE COVERALLS & BOOT COVERS	X	
	PROPER NIOSH RESPIRATORS TYPE RESPIRATOR: <u>½ face APR</u> FILTER: <u>P-100</u>	X	
	HEAD PROTECTION		NO
	EYE PROTECTION		NO
SHOWERS	FUNCTIONING		N/A
	HOT AND COLD RUNNING WATER		N/A
	WATER COLLECTION / FILTERING DEVICE FUNCTIONAL	X	
WORK HABITS	HOUSE KEEPING - MATERIALS AND EQUIPMENT STORED. LOCKERS AND PERSONAL ITEM CONTAINERS	X	
SAFETY MEETING	COMPETENT PERSON HAS CONDUCTED A SAFETY MEETING	X	
BASELINE MONITORING	BASELINE MONITORING CONDUCTED PRIOR TO START OF PREPARATIONS	X	
PROJECT DESIGN	PROJECT DESIGN ON SITE, AND ALL PREPARATIONS COMPLETED IN ACCORDANCE WITH DESIGN	X	
DOCUMENTS	NOTIFICATION, PERMIT, ABATEMENT PLAN, CONTRACTOR LICENSE, SUPERVISOR LICENSE, WORKER LICENSE, TRAINING, & MEDICAL, FIT TEST DOCUMENTATION ON SITE AND IN ORDER	X	

MARK W/ X, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG

See **Asbestos Abatement Monitoring Checklist and Log of Events-** for details concerning project.

Page 2 of 2

Signature of Inspector/Project Monitor:  Date: 17 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

## ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 17 Feb 01	

<b>REMOVAL CONTRACTOR:</b> Hillian				<b>MONITORING CONTRACTOR:</b> INDUSTRIAL HYGIENE TECHNOLOGIES, INC.			
<b>CONTRACTOR SUPERVISOR:</b> Juan A. Giron							
<b>TIME ON SITE:</b> 0630		<b>TIME OFF SITE:</b> 1830		<b>TIME ON SITE:</b> 0630		<b>TIME OFF SITE:</b> 1830	
<b>ABATEMENT SCOPE OF WORK:</b> Demolition, Decontamination w/ possible TSI removal							
<b>GENERAL SHIFT WORK PLAN:</b> (3) Mini-Containments w/ Non-ACM demolition & ACM decontamination							
<b>TYPE AND QUANTITY OF ASBESTOS REMOVED THIS SHIFT:</b> N/A							
<b>OSHA ACTIVITY CLASSIFICATION</b>	<b>CLASS I</b>	<b>X</b>	<b>CLASS II</b>		<b>CLASS III</b>	<b>X</b>	<b>CLASS IV</b>
<b>INSPECTION CATEGORY</b>	<b>ACTIVITY TO BE CHECKED</b>				<b>WITHIN LIMITS</b>	<b>PROBLEMS ENCOUNTERED</b>	
<b>WORK SITE ISOLATION</b>	BARRIER TAPE				N/A		
	FULL CONTAINMENT				Mini(s)		
	NEGATIVE PRESSURE -0.02 MINIMUM				X		
	FOUR AIR CHANGES PER HOUR				X		
	FLOOR COVERED				X		
	WALLS COVERED				X		
	CRITICAL BARRIERS INTACT				X		
	AREA VENTILATION OFF & VENTS COVERED				X		
	NEGATIVE PRESSURE GLOVEBAG USED				N/A		
<b>SIGNAGE</b>	CAUTION SIGNS AT STAGING AREA				X		
	OSHA SIGN (ASBESTOS) AT ENTRANCES TO WORK AREA				X		
	WASTE CONTAINERS LABELED PER NESHAP & GENERATOR				X		
	HVAC TAG OUT				X		
<b>MARK W/ X - EXPLAIN IN NOTES, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG</b>							

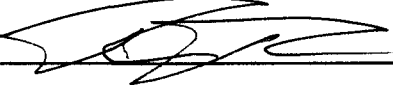
Signature of Inspector/Project Monitor:  Date: 17 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 17 Feb 01	

INSPECTION CATEGORY	ACTIVITY TO BE CHECKED	WITHIN LIMITS	PROBLEMS ENCOUNTERED
<b>WORK PRACTICES</b>	HIGH-SPEED TOOLS, COMPRESSED AIR, DRY SWEEPING, SHOVELING, EMPLOYEE ROTATION NOT IN USE	X	
	REMOVED MATERIAL PROPERLY BAGGED	X	
	WASTE REMOVED PRIOR TO SHIFT END	X	
	HEPA VACUUM IN USE	X	
	MATERIAL KEPT WET / USE OF WET METHODS	X	
	AIRLESS SPRAYER IN USE	X (Hudson Sprayer)	
	OSHA COMPLIANT GLOVEBAG PROCEDURE	N/A	
<b>WORKER PROTECTION</b>	DISPOSABLE CLOTHING USED ONCE	X	
	PROPER NIOSH RESPIRATORS TYPE RESPIRATOR: _____ FILTER: ½ Face APR P-100	X	
	PROPER DECON SEQUENCE FOLLOWED	X	
<b>SHOWERS</b>	FUNCTIONING	N/A	
	HOT AND COLD RUNNING WATER	N/A	
	USED EACH DEPARTURE	X	
	WATER COLLECTED & FILTERED PROPERLY	X	
<b>WORK HABITS IN WORK AREA</b>	NO SMOKING, EATING OR DRINKING IN THE WORK AREA	X	
<b>DOCUMENTS</b>	NOTIFICATION, PERMIT, ABATEMENT PLAN, CONTRACTOR LICENSE, SUPERVISOR LICENSE, WORKER LICENSE, TRAINING, & MEDICAL, FIT TEST DOCUMENTATION ON SITE AND IN ORDER	X	
<b>MARK W/ X - EXPLAIN IN NOTES, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG</b>			

Signature of Inspector/Project Monitor:  Date: 17 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 17 Feb 01	

**DAILY LOG OF EVENTS**

**Remediation Activities**

- 0615: Hillian on site New Executive Office Building 725 17<sup>TH</sup> Street NW Washington DC . Juan A. Giron Hillian superintendent informs IHT that Hillian shall be commencing demolition and decontamination operations with the potential for ACM Class I removal operations using Mini-Containments, hand tools, and wet methods. These removal activities are to occur in 5<sup>TH</sup> Floor 5221 - 5235 Odd Rooms Risers 42A to 53A Mini-Containment Work Area's A, B, & C. Hillian has been contracted to cut out (2) 2'x2' sections of non-ACM plaster wall per riser at the general location of the fittings associated with the Fan Coil Unit with a Mini-Containment. Spray-On Surfacing material is located above the position of the cut and there is the possibility of TSI hard plaster fittings on the elbows. Hillian has been contracted to conduct decontamination operations for Spray-On Surfacing Material Debris and possible TSI fitting removal once the access panels have been cut. All debris to be disposed of as regulated ACM waste in EPA approved landfill.
- 0645: Hillian workers mobilize and continue prepwork in 5<sup>TH</sup> Floor 5221 - 5235 Odd Rooms Risers 42A to 53A Mini-Containment Work Area's A, B, & C. Hillian expects to be ready to commence removal operations around 8:00<sup>AM</sup>.
- 0810: Hillian workers commence demolition operations in 5<sup>TH</sup> Floor Room 5235 Risers 53A Mini-Containment Work Area C.
- 0910: Hillian workers commence demolition operations in 5<sup>TH</sup> Floor Room 5221 Risers 42A-50A Mini-Containment Work Area A.
- 1235-1330: Hillian Break
- 1350: Hillian workers commence demolition operations in 5<sup>TH</sup> Floor Room 5235 Risers 50A-53A Mini-Containment Work Area B.
- 1515: Hillian workers complete demolition and decontamination operations in 5<sup>TH</sup> Floor Room 5235 Risers 53A Mini-Containment Work Area C. Hillian informs IHT that Hillian encountered a total of (13) TSI fittings.
- 1930: Hillian departed the site.

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Signature of Inspector/Project Monitor:  Date: 17 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

## ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS

<b>CLIENT: GSA, NCR, SDS, WPYG</b>	<b>ORDER NUMBER: P-11-01-DC-0101</b>	<b>CONTRACT NUMBER: GS11P00MQD0098</b>	<b>ACT NUMBER: PO2642534</b>
<b>BUILDING: New Executive Office Bldg:</b>		<b>LOCATION: 725 17<sup>TH</sup> Street NW. Washington, DC</b>	
<b>PROJECT: 5<sup>TH</sup> Floor Fan Coil Unit Replacement Project</b>		<b>DATE: 17 Feb 01</b>	

### Sampling

0615: IHT on site to perform area air monitoring and abatement quality control.

0710: IHT began sampling.

1920: IHT completed sampling. IHT off site.

### Inspections

0705: IHT conducts pre-commencement inspection of Room 5235 Risers 53A Mini-Containment Work Area C. IHT notes that Hillian has set up a Mini-Containment, with single layer Critical Barrier, Drop Layer of Poly, AFD in operation, signs & DCON bucket in place. Deemed satisfactory Hillian authorized to commence demolition & decontamination operations in Mini-Containment C.

1020: IHT conduct pre-sealant inspection of Room 5235 Risers 53A Mini-Containment Work Area C.. IHT notes area free of visible ACM dust and debris. Hillian supervisor informs IHT that Hillian worker did not encounter any TSI fittings. Deemed satisfactory. Hillian authorized to encapsulate work area.

0855: IHT conducts pre-commencement inspection of Room 5221 Risers 42A-50A Mini-Containment Work Area A. IHT notes that Hillian has set up a Mini-Containment, with single layer Critical Barrier, Drop Layer of Poly, AFD's in operation, signs & DCON bucket in place. Deemed satisfactory Hillian authorized to commence demolition & decontamination operations in Mini-Containment A.

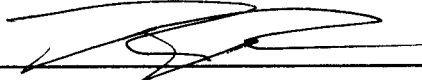
1220: IHT conduct pre-sealant inspection of Room 5221 Risers 42A-50A Mini-Containment Work Area A. IHT notes area not free of visible ACM dust and debris. IHT notes TSI fitting residue on elbows, plaster debris on the ground and Surfacing Material overspay on brick behind fiberglass pipe runs. Deemed un-satisfactory. Hillian requested to re-clean work area.

1345: IHT conducts pre-commencement inspection of Room 5235 Risers 50A-53A Mini-Containment Work Area B. IHT notes that Hillian has set up a Mini-Containment, with single layer Critical Barrier, Drop Layer of Poly, AFD in operation, signs & DCON bucket in place. Deemed satisfactory Hillian authorized to commence demolition & decontamination operations in Mini-Containment B.

1500: IHT conduct pre-sealant inspection of Room 5221 Risers 42A-50A Mini-Containment Work Area A. IHT notes area free of visible ACM dust and debris. Hillian supervisor informs IHT that Hillian workers removed 11 TSI fittings in Work Area A. Deemed satisfactory. Hillian authorized to encapsulate work area.

1520: IHT conduct pre-sealant inspection of 5235 Risers 50A-53A Mini-Containment Work Area B. IHT notes area free of visible ACM dust and debris. Hillian supervisor informs IHT that Hillian workers removed (2) TSI fittings in Work Area A. Deemed satisfactory. Hillian authorized to encapsulate work area.

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Signature of Inspector/Project Monitor:  Date: 17 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 17 Feb 01	

**Comments**

ACM Class I demolition and decontamination operations in proceeded without incident. PCM air sample analysis preformed: IHT reported no elevated sample results: All area samples outside 5<sup>TH</sup> Floor Room 5221 - 7235 Odd Rooms Risers 42A to 53A Mini-Containment Work Area's A, B, & C reported airborne fiber concentration levels below 0.01 fibers/cc.

PCM post abatement air sample analysis preformed: IHT reported no elevated sample results: All area samples inside 5<sup>TH</sup> Floor Room 5221 - 7235 Odd Rooms Risers 42A to 53A Mini-Containment Work Area's A, B, & C work area reported airborne fiber concentration levels below 0.01 fibers/cc. Deemed Satisfactory. IHT authorizes Hillian to tear down 5<sup>TH</sup> Floor Room 5221 - 7235 Odd Rooms Risers 42A to 53A Mini-Containment Work Area's A, B, & C.


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Signature of Inspector/Project Monitor:  Date: 17 Feb 01


Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**Industrial Hygiene Technologies, Inc.**  
Environmental & Industrial Hygiene Consultants

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 17 Feb 01	

PCM SAMPLE LOG										
Microscopist:  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-021701-01RR	REM	New Executive Office Building: Hall adj to Room 4220	3.0	3.0	7:55 AM	12:05 PM	250	750	3.5	<0.005
2534-021701-02RR	REM	New Executive Office Building: Room 6227	3.0	3.0	7:48 AM	12:03 PM	255	765	2.0	<0.004
2534-021701-03RR	REM	New Executive Office Building: Hall adj to Room 5218	5.0	5.0	7:06 AM	11:07 AM	241	1205	7.5	0.003
2534-021701-04RR	REM	New Executive Office Building: Hall adj to Room 5234	5.0	5.0	7:07 AM	11:08 AM	241	1205	6.0	<0.003
2534-021701-05RR	DCON	New Executive Office Building: Room 5235 Riser 53A Work Area C DCON Clean Room	10.0	10.0	7:03 AM	8:23 AM	80	800	13.0	0.008

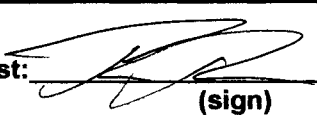
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Signature of Inspector/Project Monitor:  Date: 17 Feb 01


Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 17 Feb 01	

PCM SAMPLE LOG										
Microscopist:  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-021701-06RR	CB	New Executive Office Building: Room 5235 Riser 53A Work Area C critical barrier adj to DCON	10.0	10.0	7:03 AM	8:23 AM	80	800	14.5	0.009
2534-021701-07RR	STA	New Executive Office Building: Room 5235 Riser 53A Work Area C inside Mini-Containment	3.0	3.0	7:01 AM	8:26 AM	85	255	36.5	0.070
2534-021701-08RR	DCON	New Executive Office Building: Room 5221 Riser 42A -50A Work Area A DCON Clean Room	10.0	10.0	9:14 AM	11:16 AM	122	1220	18.0	0.007
2534-021701-09RR	CB	New Executive Office Building: Room 5221 Riser 42A -50A Work Area A critical barrier adj to DCON	10.0	10.0	9:14 AM	11:16 AM	122	1220	8.5	0.003

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Signature of Inspector/Project Monitor:  Date: 17 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)



**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 17 Feb 01	

PCM SAMPLE LOG										
Microscopist:  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-021701-10RR	DCON	New Executive Office Building: Room 5221 Riser 42A -50A Work Area A DCON Clean Room	10.0	10.0	9:07 AM	11:18 AM	131	1310	19.5	0.007
2534-021701-11RR	CB	New Executive Office Building: Room 5221 Riser 42A -50A Work Area A critical barrier adj to DCON	10.0	10.0	9:07 AM	11:18 AM	131	1310	9.0	0.003
2534-021701-12RR	STA	New Executive Office Building: Room 5221 Riser 43A Work Area A inside Mini-Containment	3.0	3.0	9:02 AM	11:32 AM	150	450	29.0	0.032
2534-021701-13RR	STA	New Executive Office Building: Room 5221 Riser 48A Work Area A inside Mini-Containment	3.0	3.0	9:02 AM	11:32 AM	150	450	32.5	0.035


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Signature of Inspector/Project Monitor:  Date: 17 Feb 01

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(Print/Type) (Print/Type)

## ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 17 Feb 01	

PCM SAMPLE LOG										
Microscopist:  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-021701-14RR	DCON	New Executive Office Building: Room 5235 Riser 50A-53A Work Area B DCON Clean Room	10.0	10.0	1:46 PM	3:11 PM	85	850	12.5	0.007
2534-021701-15RR	CB	New Executive Office Building: Room 5235 Riser 50A-53A Work Area B critical barrier adj to DCON	10.0	10.0	1:46 PM	3:11 PM	85	850	7.0	<0.004
2534-021701-16RR	STA	New Executive Office Building: Room 5235 Riser 50A-53A Work Area B inside Mini-Containment	3.0	3.0	12:16 PM	3:16 PM	180	540	25.5	0.023
2534-021701-17RR	REM	New Executive Office Building: Hall adj to Room 4220	3.0	3.0	12:05 PM	4:05 PM	240	720	0.5	<0.005
2534-021701-18RR	REM	New Executive Office Building: Room 6227	3.0	3.0	12:03 PM	4:03 PM	240	720	1.0	<0.005

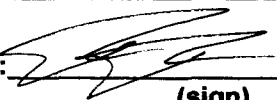
Page 9 of 11

Signature of Inspector/Project Monitor:  Date: 17 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

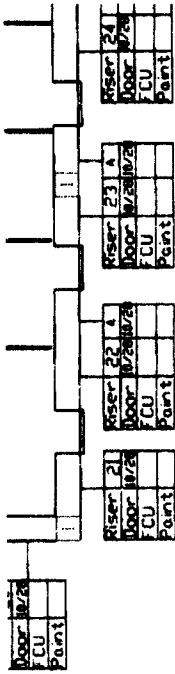
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<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 17 Feb 01	

PCM SAMPLE LOG										
Microscopist:  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-021701-19RR	REM	New Executive Office Building: Hall adj to Room 5218	5.0	5.0	11:07 AM	3:22 PM	255	1275	2.0	<0.003
2534-021701-20RR	REM	New Executive Office Building: Hall adj to Room 5234	5.0	5.0	11:08 AM	3:23 PM	255	1275	1.5	<0.003
2534-021701-21RR	DCON	New Executive Office Building: Room 5221 Riser 42A -50A Work Area A DCON Clean Room	5.0	5.0	11:17 AM	3:02 PM	225	1125	16.0	0.007
2534-021701-22RR	CB	New Executive Office Building: Room 5221 Riser 42A -50A Work Area A critical barrier adj to DCON	5.0	5.0	11:17 AM	3:02 PM	225	1125	4.5	<0.003
2534-021701-23RR	DCON	New Executive Office Building: Room 5221 Riser 42A -50A Work Area A DCON Clean Room	5.0	5.0	11:20 AM	3:00 PM	220	1100	14.0	0.006

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Signature of Inspector/Project Monitor:  Date: 17 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

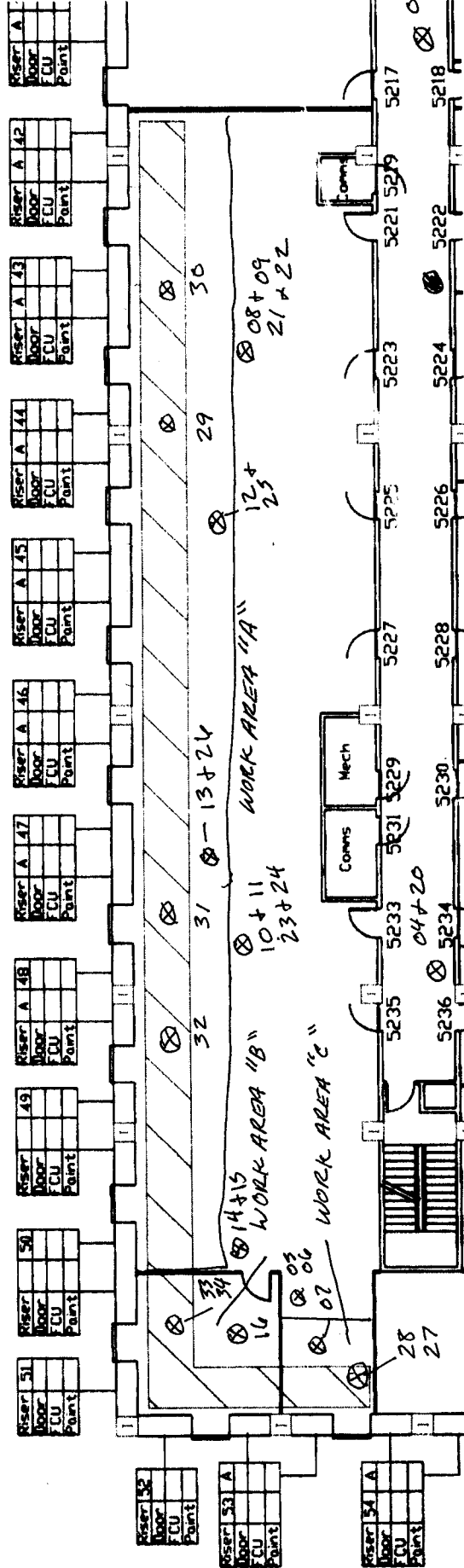


Disconnect computers as necessary  
nlt 5:00 PM Friday, 16 FEB  
Move necessary furniture from work  
zones 5:00-7:00 PM Friday, 16 FEB

Contractor installs containment  
beginning 7:00 PM Friday, 16 FEB  
Contractor works 6:30 AM - 3:30 PM  
Saturday and Sunday, 17-18 FEB

Movers restore furniture nlt 8:00 AM  
Tuesday, 20 FEB  
ISI install computers to be operating  
nlt 8:30 AM Tuesday, 20 FEB

FOR OFFICIAL USE ONLY



⊗ 4th Floor  
02 + 18

⊗ 4th Floor  
01 + 17

1HT  
2/17/01

**ABATEMENT FINAL INSPECTION CHECKLIST & LOG**

<b>CLIENT: GSA, NCR, SDS, WPYG</b>		<b>ORDER NUMBER: P-11-01-DC-0101</b>		<b>CONTRACT NUMBER: GS11P00MQD0098</b>		<b>ACT NUMBER: PO2642534</b>	
<b>BUILDING:</b> New Executive Office Bldg:				<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC			
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project				<b>DATE:</b> 17 Feb 01			
<b>REMOVAL CONTRACTOR:</b> Hillian				<b>MONITORING CONTRACTOR:</b>			
<b>CONTRACTOR SUPERVISOR:</b> Juan A. Giron				INDUSTRIAL HYGIENE TECHNOLOGIES, INC.			
				<b>TIME START:</b> 0615		<b>TIME COMPLETE:</b>	
<b>ABATEMENT SCOPE OF WORK:</b> Demolition, Decontamination w/ possible TSI removal							
<b>TYPE OF ASBESTOS MATERIAL ABATED</b>		N/A		<b>QTY. OF ASBESTOS MATERIAL ABATED</b>		N/A	
<b>OSHA ACTIVITY CLASSIFICATION</b>	<b>CLASS I</b>		<b>CLASS II</b>		<b>CLASS III</b>		<b>CLASS IV</b>
<b>DESCRIBE SPECIFIC WORK AREA INSPECTED:</b> NEOB: 5 <sup>TH</sup> Floor 5221 - 5235 Odd Rooms Risers 42A to 53A Mini-Containment Work Area's A, B, & C.							
<b>TOTAL SQUARE FOOTAGE OF WORK AREA:</b> 3 Mini-Containments (A- 400ft <sup>2</sup> )( B- 60ft <sup>2</sup> ) (C -20ft <sup>2</sup> )							
<b>FINAL CLEARANCE (AHERA, PCM, NIOSH 7402, AGGRESSIVE):</b> PCM							
<b>INSPECTION CATEGORY</b>	<b>ACTIVITY TO BE CHECKED</b>	<b>WITHIN LIMITS</b>	<b>PROBLEMS ENCOUNTERED</b>				
Residual Dust / Debris	Floor	YES					
	Horizontal Surfaces	YES					
	Pipes	YES					
	Ventilation Equip.	YES					
	Ductwork	N/A					
	Registers	N/A					
	Lights	N/A					
	Other	N/A					
(The above questions are to be answered "YES" or "Problem Encountered Noted".)							

Signature of Inspector/Project Monitor:  Date: 17 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ABATEMENT FINAL INSPECTION CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 17 Feb 01	

See **Asbestos Abatement Monitoring Checklist and Log of Events- Daily Log of Events** for details concerning project.


Page 2 of 4

Signature of Inspector/Project Monitor:  Date: 17 Feb 01


Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**Industrial Hygiene Technologies, Inc.**  
Environmental & Industrial Hygiene Consultants

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
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<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 17 Feb 01	

PCM SAMPLE LOG										
Microscopist:  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-021701-27RR	POST	New Executive Office Building: Room 5235 Riser 53A Work Area C inside Mini-Containment	10.0	10.0	10:43 AM	12:43 PM	120	1200	4.0	<0.003
2534-021701-28RR	POST	New Executive Office Building: Room 5235 Riser 53A Work Area C inside Mini-Containment	10.0	10.0	10:43 AM	12:43 PM	120	1200	9.5	0.004
2534-021701-29RR	POST	New Executive Office Building: Room 5221 Riser 42A-50A Work Area A inside Mini-Containment	10.0	10.0	3:44 PM	5:44 PM	120	1200	8.0	0.003
2534-021701-30RR	POST	New Executive Office Building: Room 5221 Riser 42A-50A Work Area A inside Mini-Containment	10.0	10.0	3:44 PM	5:44 PM	120	1200	10.5	0.004
2534-021701-31RR	POST	New Executive Office Building: Room 5221 Riser 42A-50A Work Area A inside Mini-Containment	10.0	10.0	3:47 PM	5:47 PM	120	1200	5.5	<0.003


Page 3 of 4

Signature of Inspector/Project Monitor:  Date: 17 Feb 01

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**ABATEMENT FINAL INSPECTION CHECKLIST & LOG**

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<b>PCM SAMPLE LOG</b>										
Microscopist:  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-021701-32RR	POST	New Executive Office Building: Room 5221 Riser 42A-50A Work Area A inside Mini-Containment	10.0	10.0	3:47 PM	5:47 PM	120	1200	4.0	<0.003
2534-021701-33RR	POST	New Executive Office Building: Room 5235 Riser 50A-53A Work Area B inside Mini-Containment	10.0	10.0	3:52 PM	5:52 PM	120	1200	6.0	<0.003
2534-021701-34RR	POST	New Executive Office Building: Room 5235 Riser 50A-53A Work Area B inside Mini-Containment	10.0	10.0	3:52 PM	5:52 PM	120	1200	3.5	<0.003

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Signature of Inspector/Project Monitor:  Date: 17 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)



## GSA ABATEMENT PERSONNEL REPORT

<b>BUILDING:</b> New Executive Office Building		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 17 February 01	
<b>REMOVAL CONTRACTOR:</b> Hillian Brothers		<b>MONITORING CONTRACTOR:</b> INDUSTRIAL HYGIENE TECHNOLOGIES, INC	
<b>SHIFT START TIME:</b> 0630		<b>SHIFT COMPLETION TIME:</b>	
<b>SCOPE OF WORK</b>			
<b>ASBESTOS WORK:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project Demolition & Decontamination			
ASBESTOS CLASS I	ASBESTOS CLASS II	ASBESTOS CLASS III	X ASBESTOS CLASS IV
NEA OBTAINED	NEA OBTAINED	NEA OBTAINED	NEA OBTAINED
<b>LEAD WORK:</b> N/A			
LEAD ABATEMENT	LEAD DEMOLITION	INTACT ITEMS	STRIPPING
NEG. INIT. DETERM.	NEG. INIT. DETERM.	NEG. INIT. DETERM.	NEG. INIT. DETERM.

PERSONAL INFORMATION			
NAME: (LAST, FIRST, MI - PRINT)	SOCIAL SECURITY NO.	MEDICALS / FIT TESTS ON SITE	STATE LICENSE NO. / TYPE (TRAINING CERT. NO)
JUAN A. GIRON	571-23-5460	10/24/00	<del>30004304</del> D.C.
SILVIA FLORES	578-21-0278	7/3/00	047989
ODIRSH ARGUETA	238-51-6192	2/13/01	049768
NELSON ORELLANA	578-25-4445	10/12/00	049025
POREFIRO M VELASQUEZ	230-85-9417	01/18/01	048860
JORGE PORTILLO	216-43-9208	5/18/00	047161
ELSIRA REYES	606-58-9196	9/28/00	049126
GERTRUDI MEDINA VELASQUEZ	225-85-3005	7/25/00	27932272

Signature of Inspector/Project Monitor:  Date: 02/17/01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

## **PROJECT PROGRESS / CLOSEOUT REPORT**

**Site Name:** New Executive Office Building

**Project Name:** Fan Coil Unit Replacement Project - Chilled Water / Hot Water  
Supply Line Access Door Installation, Asbestos Hazard Reduction

**Work Area Location:** 5<sup>th</sup> Floor 5226 - 5236, Even Room Risers 54A to 64A, Work Areas  
A, B, C, D, E, F, & G

**Order Number:**  
P-11-01-DC-0107

**Contract Number:**  
GS11P00MQD0098

**ACT Number:**  
PO2642534

**Project Date (s):** February 23, 24, 2001

**Sampling Conducted:** Pre-abatement, Area, Work Area, Remote, and Final Clearance  
Monitoring - PCM Analysis (NIOSH 7400 Method)

**Project Description:** Industrial Hygiene Technologies, Inc. (IHT) was retained to  
conduct asbestos abatement project monitoring and design  
conformance control during the demolition of perimeter walls to  
allow for future installation of perimeter wall plumbing access  
doors associated with the New Executive Office Building Fan Coil  
Unit replacement Project.

Hillian Brothers, Inc. was retained to erect mini-negative pressure  
enclosures to be used in the demolition of perimeter plaster walls,  
cleaning of plumbing chases, and removal of asbestos TSI, as  
encountered. Known asbestos hazards associated with this  
project include over-spray / delaminated spray applied asbestos  
fire retardant, cementitious fittings, pipe insulation, and  
contaminated debris. Hillian Brothers is utilizing asbestos  
engineering controls to ensure demolition activities which may  
disturb friable asbestos materials and contaminated debris within  
the chases, do not contaminate adjacent office areas. When  
encountered, asbestos is removed using wet methods.  
Regardless of the existence of asbestos TSI on plumbing, each  
chase area is presumed to be contaminated with asbestos fire  
retardant, and decontaminated.

**Project Description Continued:**

Work began at 6:45 pm, February 23, 2001. Preparation of the work area, and pre-abatement monitoring were conducted. All work was conducted as per abatement plan, with the exception of fan coil unit decontamination. Fan coil units are protected and covered during these operations. Work to clean fan coil units will take place during another phase of the project.

The following work shift began at 6:15am, February 24, 2001 and involved lock-out / tag-out of the HVAC systems, additional preparations, demolition of perimeter walls, decontamination of wall chases, and removal of cementitious fittings.

IHT conducted sampling in each of 7 mini-containments (A, B, C, D, E, F, &G), within each separate office, at AFD Exhaust, remotely within adjacent hallways, outside the work area, and on the floors above and below. The sampling plan was developed by Mark Sovich, Michael MacCabe, and Ryan Reed during a pre-work walkthrough conducted February 9, 2001. The sampling plan involves assessment of each functional area of abatement, within the control areas, staging areas, AFD exhaust, and remotely such that the "sampling train" is sufficient to rapidly assess and delineate fiber migration, should a fiber release episode occur during the operation. Immediate analysis of samples mid and end of shift is conducted to ensure safety of un-protected workers outside of the control area, and rapid response to fiber release.

Work was completed and contractors fully demobilized by 6:15 PM 02/24/01. All work was completed as per modified scope of work / abatement plan, with no elevated fiber concentrations reported outside of the control area. Final clearance was achieved within each NPE with all results reported below 0.01 F/cc.

**Deviations:**

The GSA scope of work specifies cleaning of the Fan Coil Units. This work will be conducted during a future phase of the project. Due to the size of each mini-containment, 2 final clearance samples were utilized to clear each containment. This is a deviation from the GSA clearance protocol, but in conformance with District of Columbia Asbestos Regulation. Deviation was taken as the change was in compliance with applicable regulations, provided adequate assessment for completion, facilitated timely project completion, and provided significant overall cost savings for the client.

**Asbestos Removed:**

Overspray and fire retardant debris was removed from each wall penetration. Each pipe chase penetration, and 7 NPE's were fully decontaminated and encapsulated. A total of 13 cementitious fittings were removed.

## PRE-ABATEMENT CHECKLIST & LOG

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<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 23 Feb 01	

<b>REMOVAL CONTRACTOR:</b> Hillian Brothers	<b>MONITORING CONTRACTOR:</b> INDUSTRIAL HYGIENE TECHNOLOGIES, INC.	
<b>CONTRACTOR SUPERVISOR:</b> Silvio Argueta		
	<b>TIME START:</b> 1845	<b>TIME COMPLETE:</b> 2215

**ABATEMENT SCOPE OF WORK:** Prep work for Class I removal operations

<b>TYPE OF ASBESTOS MATERIAL TO BE ABATED</b>	<b>Category 1 Friable</b>	<b>QTY. OF ASBESTOS MATERIAL TO BE ABATED</b>	Unknown
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<b>OSHA ACTIVITY CLASSIFICATION</b>	<b>CLASS I</b>	<b>X</b>	<b>CLASS II</b>		<b>CLASS III</b>		<b>CLASS IV</b>	
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INSPECTION CATEGORY	ACTIVITY TO BE CHECKED	WITHIN LIMITS	DEVIATION
<b>WORK SITE ISOLATION</b>	BARRIER TAPE TO ISOLATE STAGING AREA AND DECON		X- Prep Work
	FULL CONTAINMENT		X- Prep Work
	NEGATIVE PRESSURE -0.02 MINIMUM		X- Prep Work
	FOUR AIR CHANGES PER HOUR		X- Prep Work
	CRITICAL BARRIERS INTACT (DUCTS, WINDOWS, DOORS, ALL PENETRATIONS)		X- Prep Work
	FLOOR COVERED		X- Prep Work
	WALLS COVERED		X- Prep Work
	AREA VENTILATION OFF & VENTS COVERED		X- Prep Work
	GLOVEBAGS SMOKE TESTED AND FOUND SATISFACTORY		X- Prep Work
<b>SIGNAGE</b>	CAUTION SIGNS AT STAGING AREA		X- Prep Work
	OSHA SIGN (ASBESTOS) AT ENTRANCES TO WORK AREA		X- Prep Work
	WASTE CONTAINERS LABELED PER NESHAP & GENERATOR		X- Prep Work
	HVAC SYSTEM TAGGED OUT		X- Prep Work
	NO SMOKING, EATING OR DRINKING IN THE WORK AREA		X- Prep Work

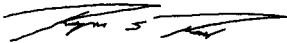
Signature of Inspector/Project Monitor:  Date: 23 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

## PRE-ABATEMENT CHECKLIST & LOG

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 23 Feb 01	

MARK W/ X, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG			
INSPECTION CATEGORY	ACTIVITY TO BE CHECKED	WITHIN LIMITS	DEVIATION
<b>INSPECTION</b>	HIGH-SPEED ABRASIVE DISC SAWS, COMPRESSED AIR, DRY SWEEPING, SHOVELING, EMPLOYEE ROTATION - NOT TO BE USED		X- Prep Work
	LABELED WASTE CONTAINERS ON SITE		X- Prep Work
	HEPA VACUUM FOUND WORKING AND ACCEPTABLE		X- Prep Work
	ACCESS TO WATER FOR WET METHODS		X- Prep Work
	AIRLESS SPRAYER WORKING AND IN WORK AREA		X- Prep Work
<b>WORKER PROTECTION</b>	DISPOSABLE COVERALLS & BOOT COVERS		X- Prep Work
	PROPER NIOSH RESPIRATORS TYPE RESPIRATOR: _____ FILTER: _____		X- Prep Work
	HEAD PROTECTION		X- Prep Work
	EYE PROTECTION		X- Prep Work
<b>SHOWERS</b>	FUNCTIONING		X- Prep Work
	HOT AND COLD RUNNING WATER		X- Prep Work
	WATER COLLECTION / FILTERING DEVICE FUNCTIONAL		X- Prep Work
<b>WORK HABITS</b>	HOUSE KEEPING - MATERIALS AND EQUIPMENT STORED. LOCKERS AND PERSONAL ITEM CONTAINERS	X	
<b>SAFETY MEETING</b>	COMPETENT PERSON HAS CONDUCTED A SAFETY MEETING	X	
<b>BASELINE MONITORING</b>	BASELINE MONITORING CONDUCTED PRIOR TO START OF PREPARATIONS	X	
<b>PROJECT DESIGN</b>	PROJECT DESIGN ON SITE, AND ALL PREPARATIONS COMPLETED IN ACCORDANCE WITH DESIGN	X	
<b>DOCUMENTS</b>	NOTIFICATION, PERMIT, ABATEMENT PLAN, CONTRACTOR LICENSE, SUPERVISOR LICENSE, WORKER LICENSE, TRAINING, & MEDICAL, FIT TEST DOCUMENTATION ON SITE AND IN ORDER	X	

Signature of Inspector/Project Monitor: \_\_\_\_\_  Date: 23 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

## PRE-ABATEMENT CHECKLIST & LOG

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<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 23 Feb 01	

MARK W/ X, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG

## DAILY LOG OF EVENTS

### Remediation Activities

- 1845: Hillian on site New Executive Office Building 725 17<sup>TH</sup> Street NW Washington DC . Silvio Argueta, Hillian superintendent informs IHT that Hillian shall be commencing prepwork for ACM Class I removal operations using Mini-Containments, hand tools, and wet methods. These removal activities are to occur in 5<sup>TH</sup> Floor 5226 - 5236 Even Rooms Risers 54A to 64A Mini-Containment Work Area's A, B, C, D, E, F, & G.
- 1935: Hillian workers mobilize and commence prepwork in 5<sup>TH</sup> Floor 5226 - 5236 Even Rooms Risers 54A to 64A Mini-Containment Work Area's A, B, C, D, E, F, & G.
- 2145: Hillian workers halt prep work operations. Hillian to return to site tomorrow 2/24/01 @ 6:30AM to continue prepwork operations and commence demolition and decontamination with potential TSI fitting removal.
- 2200: Hillian departed the site.

### Sampling

- 1830: IHT on site to perform area air monitoring and abatement quality control.
- 1920: IHT began sampling.
- 2200: IHT completed sampling. IHT off site.

### Inspections

No inspections necessary.

### Comments

Hillian Prepwork operations proceeded without incident.

PCM pre abatement air sample analysis performed: IHT reported no elevated sample results: All area samples reported airborne fiber concentration levels below 0.01 fibers/cc. Deemed Satisfactory.

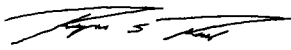
Page 3 of 7

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**Industrial Hygiene Technologies, Inc.**  
Environmental & Industrial Hygiene Consultants

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<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 23 Feb 01	

<div style="display: flex; justify-content: space-between; align-items: center;"> <div>Microscopist: </div> <div><b>PCM SAMPLE LOG</b></div> </div>										
Sample Number      Sample Type      Location			Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-022301-01RR	PRE	New Executive Office Building: Hall adj to Room 5218	10.0	10.0	7:22 PM	9:27 PM	125	1250	9.0	0.004
2534-022301-02RR	PRE	New Executive Office Building: Hall adj to Room 5236	10.0	10.0	7:25 PM	9:28 PM	123	1230	10.0	0.004
2534-022301-03RR	PRE	New Executive Office Building: Room 5226 adj to Riser 63A -64A Work Area A	10.0	10.0	7:31 PM	9:32 PM	121	1210	12.5	0.005
2534-022301-04RR	PRE	New Executive Office Building: Room 5226 adj to Riser 63A-64A Work Area A	10.0	10.0	7:31 PM	9:32 PM	121	1210	14.0	0.006
2534-021601-05RR	PRE	New Executive Office Building: Room 5228 adj to Riser 62A-63A Work Area B	10.0	10.0	7:34 PM	9:35 PM	121	1210	15.0	0.006

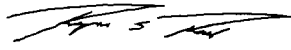
Page 4 of 7

Signature of Inspector/Project Monitor:  Date: 23 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
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**PRE-ABATEMENT CHECKLIST & LOG**

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<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 23 Feb 01	

<div style="text-align: center;">   <b>PCM SAMPLE LOG</b> </div>										
Microscopist: _____ (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-022301-06RR	PRE	New Executive Office Building: Room 5228 adj to Riser 62A-63A Work Area B	10.0	10.0	7:34 PM	9:35 PM	121	1210	16.5	0.007
2534-022301-07RR	PRE	New Executive Office Building: Room 5230 adj to Riser 60A-61A Work Area C	10.0	10.0	7:36 PM	9:38 PM	122	1220	13.0	0.005
2534-022301-08RR	PRE	New Executive Office Building: Room 5230 adj to Riser 60A-61A Work Area C	10.0	10.0	7:36 PM	9:38 PM	122	1220	15.5	0.006
2534-022301-09RR	PRE	New Executive Office Building: Room 5236 adj to Riser 60A Work Area D	10.0	10.0	7:41 PM	9:44 PM	123	1230	8.5	0.003

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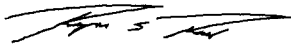
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<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 23 Feb 01	

<div style="text-align: center;">   <b>PCM SAMPLE LOG</b> </div>										
Microscopist: _____ (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-022301-10RR	PRE	New Executive Office Building: Room 5236 adj to Riser 60A Work Area D	10.0	10.0	7:41 PM	9:44 PM	123	1230	9.0	0.004
2534-022301-11RR	PRE	New Executive Office Building: Room 5236 adj to Riser 56A-59A Work Area E	10.0	10.0	7:47 PM	9:48 PM	121	1210	12.5	0.005
2534-022301-12RR	PRE	New Executive Office Building: Room 5236 adj to Riser 56A-59A Work Area E	10.0	10.0	7:47 PM	9:48 PM	121	1210	13.5	0.005
2534-022301-13RR	PRE	New Executive Office Building: Room 5236 adj to Riser 55A Work Area F	10.0	10.0	7:52 PM	9:56 PM	124	1240	16.0	0.006

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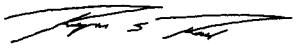
Signature of Inspector/Project Monitor: \_\_\_\_\_  Date: 23 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
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**Industrial Hygiene Technologies, Inc.**

Environmental &amp; Industrial Hygiene Consultants

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 24 Feb 01	

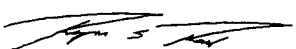
 <b>Microscopist:</b> _____ (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-022401-30RR	POST	New Executive Office Building: Room 5236 adj to Riser 54A Work Area G inside Mini-Containment	10.0	10.0	11:10 AM	1:10 PM	120	1200	3.5	<0.003
2534-022401-31RR	POST	New Executive Office Building: Room 5236 adj to Riser 54A Work Area G inside Mini-Containment	10.0	10.0	11:10 AM	1:10 PM	120	1200	4.0	<0.003
2534-022401-32RR	POST	New Executive Office Building: Room 5236 adj to Riser 55A Work Area F inside Mini-Containment	10.0	10.0	11:08 AM	1:08 PM	120	1200	2.0	<0.003
2534-022401-33RR	POST	New Executive Office Building: Room 5236 adj to Riser 55A Work Area F inside Mini-Containment	10.0	10.0	11:08 AM	1:08 PM	120	1200	3.0	<0.003

Page 2 of 5

Signature of Inspector/Project Monitor:  Date: 24 Feb 01Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ABATEMENT FINAL INSPECTION CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 24 Feb 01	

<div style="text-align: center;">   <b>PCM SAMPLE LOG</b> </div>										
Microscopist: _____ (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-022401-34RR	POST	New Executive Office Building: Room 5236 adj to Riser 56A-59A Work Area E inside Mini-Containment	10.0	10.0	11:02 AM	1:02 PM	120	1200	1.0	<0.003
2534-022401-35RR	POST	New Executive Office Building: Room 5236 adj to Riser 56A-59A Work Area E inside Mini-Containment	10.0	10.0	11:02 AM	1:02 PM	120	1200	2.5	<0.003
2534-022401-36RR	POST	New Executive Office Building: Room 5236 adj to Riser 60A Work Area D inside Mini-Containment	10.0	10.0	1:56 PM	3:56 PM	120	1200	1.0	<0.003
2534-022401-37RR	POST	New Executive Office Building: Room 5236 adj to Riser 60A Work Area D inside Mini-Containment	10.0	10.0	1:56 PM	3:56 PM	120	1200	1.5	<0.003

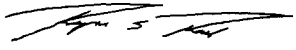
Page 3 of 5

Signature of Inspector/Project Monitor: \_\_\_\_\_  Date: 24 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ABATEMENT FINAL INSPECTION CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 24 Feb 01	

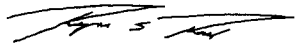
<div style="text-align: center;"> <b>PCM SAMPLE LOG</b></div>										
Microscopist: _____ (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-022401-38RR	POST	New Executive Office Building: Room 5230 adj to Riser 60A-61A Work Area C inside Mini-Containment	10.0	10.0	1:59 PM	3:59 PM	120	1200	4.5	<0.003
2534-022401-39RR	POST	New Executive Office Building: Room 5230 adj to Riser 60A-61A Work Area C inside Mini-Containment	10.0	10.0	1:59 PM	3:59 PM	120	1200	5.0	<0.003
2534-022401-40RR	POST	New Executive Office Building: Room 5228 adj to Riser 62A-63A Work Area B inside Mini-Containment	10.0	10.0	2:03 PM	4:03 PM	120	1200	8.0	0.003

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Signature of Inspector/Project Monitor: \_\_\_\_\_  
Date: 24 Feb 01Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ABATEMENT FINAL INSPECTION CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 24 Feb 01	

 <b>Microscopist:</b> _____ (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-022401-41RR	POST	New Executive Office Building: Room 5228 adj to Riser 62A-63A Work Area B inside Mini-Containment	10.0	10.0	2:03 PM	4:03 PM	120	1200	10.5	0.004
2534-022401-42RR	POST	New Executive Office Building: Room 5226 adj to Riser 63A -64A Work Area A inside Mini-Containment	10.0	10.0	3:44 PM	5:44 PM	120	1200	6.0	<0.003
2534-022401-43RR	POST	New Executive Office Building: Room 5226 adj to Riser 63A -64A Work Area A inside Mini-Containment	10.0	10.0	3:44 PM	5:44 PM	120	1200	5.5	<0.003

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Signature of Inspector/Project Monitor:  Date: 24 Feb 01Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

## ABATEMENT FINAL INSPECTION CHECKLIST & LOG

<b>CLIENT:</b> GSA, NCR, SDS, WPYG		<b>ORDER NUMBER:</b> P-11-01-DC-0101		<b>CONTRACT NUMBER:</b> GS11P00MQD0098		<b>ACT NUMBER:</b> PO2642534	
<b>BUILDING:</b> New Executive Office Bldg:				<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC			
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project				<b>DATE:</b> 24 Feb 01			

<b>REMOVAL CONTRACTOR:</b> Hillian			<b>MONITORING CONTRACTOR:</b>		
<b>CONTRACTOR SUPERVISOR:</b> Juan A. Giron			INDUSTRIAL HYGIENE TECHNOLOGIES, INC.		
			<b>TIME START:</b> 0615		<b>TIME COMPLETE:</b> 1845

**ABATEMENT SCOPE OF WORK:** Demolition, Decontamination w/ possible TSI removal

<b>TYPE OF ASBESTOS MATERIAL ABATED</b>	N/A	<b>QTY. OF ASBESTOS MATERIAL ABATED</b>	N/A
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<b>OSHA ACTIVITY CLASSIFICATION</b>	<b>CLASS I</b>		<b>CLASS II</b>		<b>CLASS III</b>		<b>CLASS IV</b>	
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**DESCRIBE SPECIFIC WORK AREA INSPECTED:** NEOB: 5<sup>TH</sup> Floor 5221 - 5235 Odd Rooms Risers 42A to 53A Mini-Containment Work Area's A, B, & C.

**TOTAL SQUARE FOOTAGE OF WORK AREA:** 7 Mini-Containments (E- 100ft<sup>2</sup>) (G- 60ft<sup>2</sup>) (F -20ft<sup>2</sup>) (D- 40ft<sup>2</sup>) (C- 40ft<sup>2</sup>) (B- 40ft<sup>2</sup>) (A -40ft<sup>2</sup>)

**FINAL CLEARANCE (AHERA, PCM, NIOSH 7402, AGGRESSIVE):** PCM

INSPECTION CATEGORY	ACTIVITY TO BE CHECKED	WITHIN LIMITS	PROBLEMS ENCOUNTERED
Residual Dust / Debris	Floor	YES	
	Horizontal Surfaces	YES	
	Pipes	YES	
	Ventilation Equip.	YES	
	Ductwork	N/A	
	Registers	N/A	
	Lights	N/A	
	Other	N/A	

(The above questions are to be answered "YES" or "Problem Encountered Noted".)

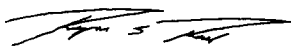
See **Asbestos Abatement Monitoring Checklist and Log of Events- Daily Log of Events** for details concerning project.

Signature of Inspector/Project Monitor:  Date: 24 Feb 01

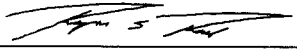
Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**PRE-ABATEMENT CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 23 Feb 01	

<div style="text-align: center;">   <b>PCM SAMPLE LOG</b> </div>										
Microscopist: _____ (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-022301-14RR	PRE	New Executive Office Building: Room 5236 adj to Riser 55A Work Area F	10.0	10.0	7:52 PM	9:56 PM	124	1240	14.0	0.006
2534-022301-15RR	PRE	New Executive Office Building: Room 5236 adj to Riser 54A Work Area G	10.0	10.0	7:49 PM	9:54 PM	125	1250	13.0	0.005
2534-022301-16RR	PRE	New Executive Office Building: Room 5236 adj to Riser 54A Work Area G	10.0	10.0	7:49 PM	9:54 PM	125	1250	11.5	0.005

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Signature of Inspector/Project Monitor: \_\_\_\_\_  Date: 23 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT: GSA, NCR, SDS, WPYG</b>		<b>ORDER NUMBER: P-11-01-DC-0101</b>		<b>CONTRACT NUMBER: GS11P00MQD0098</b>		<b>ACT NUMBER: PO2642534</b>	
<b>BUILDING:</b> New Executive Office Bldg:				<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC			
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project				<b>DATE:</b> 24 Feb 01			
<b>REMOVAL CONTRACTOR:</b> Hillian				<b>MONITORING CONTRACTOR:</b>			
<b>CONTRACTOR SUPERVISOR:</b> Juan A. Giron				INDUSTRIAL HYGIENE TECHNOLOGIES, INC.			
<b>TIME ON SITE:</b> 0630		<b>TIME OFF SITE:</b> 1830		<b>TIME ON SITE:</b> 0615		<b>TIME OFF SITE:</b> 1830	
<b>ABATEMENT SCOPE OF WORK:</b> Demolition, Decontamination w/ TSI removal							
<b>GENERAL SHIFT WORK PLAN:</b> (7) Mini-Containments w/ Non-ACM demolition & ACM decontamination							
<b>TYPE AND QUANTITY OF ASBESTOS REMOVED THIS SHIFT:</b> (7) ACM Hard Plaster Fitting on Elbows							
<b>OSHA ACTIVITY CLASSIFICATION</b>	<b>CLASS I</b>	<b>X</b>	<b>CLASS II</b>		<b>CLASS III</b>	<b>X</b>	<b>CLASS IV</b>
<b>INSPECTION CATEGORY</b>	<b>ACTIVITY TO BE CHECKED</b>				<b>WITHIN LIMITS</b>	<b>PROBLEMS ENCOUNTERED</b>	
<b>WORK SITE ISOLATION</b>	BARRIER TAPE				N/A		
	FULL CONTAINMENT				Mini(s)		
	NEGATIVE PRESSURE -0.02 MINIMUM				X		
	FOUR AIR CHANGES PER HOUR				X		
	FLOOR COVERED				X		
	WALLS COVERED				X		
	CRITICAL BARRIERS INTACT				X		
	AREA VENTILATION OFF & VENTS COVERED				X		
	NEGATIVE PRESSURE GLOVEBAG USED				N/A		
<b>SIGNAGE</b>	CAUTION SIGNS AT STAGING AREA				X		
	OSHA SIGN (ASBESTOS) AT ENTRANCES TO WORK AREA				X		
	WASTE CONTAINERS LABELED PER NESHAP & GENERATOR				X		
	HVAC TAG OUT				X		
<b>MARK W/ X - EXPLAIN IN NOTES, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG</b>							

Signature of Inspector/Project Monitor:  Date: 24 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)



## ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 24 Feb 01	

INSPECTION CATEGORY	ACTIVITY TO BE CHECKED	WITHIN LIMITS	PROBLEMS ENCOUNTERED
WORK PRACTICES	HIGH-SPEED TOOLS, COMPRESSED AIR, DRY SWEEPING, SHOVELING, EMPLOYEE ROTATION NOT IN USE	X	
	REMOVED MATERIAL PROPERLY BAGGED	X	
	WASTE REMOVED PRIOR TO SHIFT END	X	
	HEPA VACUUM IN USE	X	
	MATERIAL KEPT WET / USE OF WET METHODS	X	
	AIRLESS SPRAYER IN USE	X (Hudson Sprayer)	
	OSHA COMPLIANT GLOVEBAG PROCEDURE	N/A	
WORKER PROTECTION	DISPOSABLE CLOTHING USED ONCE	X	
	PROPER NIOSH RESPIRATORS TYPE RESPIRATOR: _____ FILTER: ½ Face APR P-100	X	
	PROPER DECON SEQUENCE FOLLOWED	X	
SHOWERS	FUNCTIONING	N/A	
	HOT AND COLD RUNNING WATER	N/A	
	USED EACH DEPARTURE	X	
	WATER COLLECTED & FILTERED PROPERLY	X	
WORK HABITS IN WORK AREA	NO SMOKING, EATING OR DRINKING IN THE WORK AREA	X	
DOCUMENTS	NOTIFICATION, PERMIT, ABATEMENT PLAN, CONTRACTOR LICENSE, SUPERVISOR LICENSE, WORKER LICENSE, TRAINING, & MEDICAL, FIT TEST DOCUMENTATION ON SITE AND IN ORDER	X	

Signature of Inspector/Project Monitor:  Date: 24 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 24 Feb 01	

**MARK W/ X - EXPLAIN IN NOTES, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG**

**DAILY LOG OF EVENTS**

**Remediation Activities**

- 0615: Hillian on site New Executive Office Building 725 17<sup>TH</sup> Street NW Washington DC . Juan A. Giron Hillian superintendent informs IHT that Hillian shall be commencing demolition and decontamination operations with the potential for ACM Class I removal operations using Mini-Containments, hand tools, and wet methods. These removal activities are to occur in 5<sup>TH</sup> Floor 5226 - 5236 Even Rooms Risers 54A to 64A Mini-Containment Work Area's A, B, C, D, E, F, & G. Hillian has been contracted to cut out (17) 2'x2' sections of non-ACM plaster wall per riser at the general location of the fittings associated with the Fan Coil Unit with a Mini-Containment. Spray-On Surfacing material is located above the position of the cut and there is the possibility of TSI hard plaster fittings on the elbows. Hillian has been contracted to conduct decontamination operations for Spray-On Surfacing Material Debris and possible TSI fitting removal once the access panels have been cut. All debris to be disposed of as regulated ACM waste in EPA approved landfill.
- 0645: Hillian workers mobilize and continue prepwork in 5<sup>TH</sup> Floor 5226 - 5236 Even Rooms Risers 54A to 64A Mini-Containment Work Area's A, B, C, D, E, F, & G. Hillian expects to be ready to commence removal operations around 7:30<sup>AM</sup>.
- 0720: IHT reviews Hillian Brothers paperwork ie. (DC licenses, training, physicals, and fit tests). IHT notes that Hillian does not possess fit test on site. IHT contacts Hillian Brothers Project Manager Paul Goodier to discuss issue. Hillian informs IHT that Hillian air monitoring contractor to conduct fit test this morning. Deemed satisfactory.
- 0730: Hillian workers commence demolition operations in 5<sup>TH</sup> Floor Room 5236 adj to Riser 56A-59A Mini-Containment Work Area E.
- 0840: Hillian workers commence demolition operations in 5<sup>TH</sup> Floor Room 5236 adj to Riser 54A Mini-Containment Work Area G & Room 5236 adj to Riser 55A Mini-Containment Work Area F.
- 0935: Hillian workers commence demolition operations in 5<sup>TH</sup> Floor Room 5236 adj to Riser 60A Mini-Containment Work Area D.
- 1045: Hillian workers commence demolition operations in 5<sup>TH</sup> Floor Room 5230 adj to Riser 60A-61A Mini-Containment Work Area C.
- 1105: Hillian workers commence demolition operations in 5<sup>TH</sup> Floor Room 5228 adj to Riser 62A-63A Mini-Containment

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Signature of Inspector/Project Monitor:  Date: 24 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 24 Feb 01	

Work Area B.

1235-1330: Hillian Break

1410: Hillian workers commence demolition operations in 5<sup>TH</sup> Floor Room 5226 Risers 63A-64A Mini-Containment Work Area A.1515: Hillian workers complete demolition and decontamination operations in 5<sup>TH</sup> Floor Room 5226 Risers 63A-64A Mini-Containment Work Area A. Hillian informs IHT that Hillian encountered a total of (13) TSI fittings.

1830: Hillian departed the site.

**Sampling**

0615: IHT on site to perform area air monitoring and abatement quality control.

0700: IHT began sampling.

1830: IHT completed sampling. IHT off site.

**Inspections**

0705-0730: IHT conducts pre-commencement inspection of Room 5236 adj to Riser 56A-59A Mini-Containment Work Area E; Room 5236 adj to Riser 55A Mini-Containment Work Area F; and Room 5236 adj to Riser 54A Mini-Containment Work Area G. IHT notes that Hillian has set up a Mini-Containment, with single layer Critical Barrier, Drop Layer of Poly, AFD in operation, signs &amp; DCON bucket in place. Deemed satisfactory Hillian authorized to commence demolition &amp; decontamination operations in Mini-Containment E, F &amp; G.

0920: IHT conduct pre-sealant inspection of Room 5236 adj to Riser 56A-59A Mini-Containment Work Area E. IHT notes area free of visible ACM dust and debris. Hillian supervisor informs IHT that Hillian workers encountered and removed (5)TSI fittings during demolition and decontamination operations. Deemed satisfactory. Hillian authorized to encapsulate work area.

0930: IHT conducts pre-commencement inspection of Room 5236 adj to Riser 60A Mini-Containment Work Area D. IHT notes that Hillian has set up a Mini-Containment, with single layer Critical Barrier, Drop Layer of Poly, AFD in operation, signs &amp; DCON bucket in place. Deemed satisfactory Hillian authorized to commence demolition &amp; decontamination operations in Mini-Containment D.

0950: IHT conduct pre-sealant inspection of Room 5236 adj to Riser 54A Mini-Containment Work Area G. IHT notes area **NOT** free of visible ACM dust and debris. IHT noted ACM surfacing material debris on top of fiberglass pipeline. Deemed **UN**-satisfactory. Hillian directed to re-clean work area.

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Signature of Inspector/Project Monitor:  Date: 24 Feb 01Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 24 Feb 01	

0955: IHT conduct pre-sealant inspection of Room 5236 adj to Riser 55A Mini-Containment Work Area F. IHT notes area free of visible ACM dust and debris. Hillian supervisor informs IHT that Hillian worker did not encounter any TSI fittings. Deemed satisfactory. Hillian authorized to encapsulate work area.

1005: IHT conduct pre-sealant inspection of Room 5236 adj to Riser 54A Mini-Containment Work Area G. IHT notes area free of visible ACM dust and debris. Hillian supervisor informs IHT that Hillian workers encountered and removed (2) TSI fittings during demolition and decontamination operations. Deemed satisfactory. Hillian authorized to encapsulate work area.

1030-1100: IHT conducts pre-commencement inspection of Room 5230 adj to Riser 60A-61A Mini-Containment Work Area C and Room 5228 adj to Riser 62A-63A Mini-Containment Work Area B. IHT notes that Hillian has set up a Mini-Containment, with single layer Critical Barrier, Drop Layer of Poly, AFD in operation, signs & DCON bucket in place. Deemed satisfactory Hillian authorized to commence demolition & decontamination operations in Mini-Containment B & C.

1135: IHT conduct pre-sealant inspection of Room 5236 adj to Riser 60A Mini-Containment Work Area D. IHT notes area free of visible ACM dust and debris. Hillian supervisor informs IHT that Hillian worker did not encounter any TSI fittings. Deemed satisfactory. Hillian authorized to encapsulate work area.

1205: IHT conduct pre-sealant inspection of Room 5230 adj to Riser 60A-61A Mini-Containment Work Area C. IHT notes area free of visible ACM dust and debris. Hillian supervisor informs IHT that Hillian worker did not encounter any TSI fittings. Deemed satisfactory. Hillian authorized to encapsulate work area.

1215: IHT conduct pre-sealant inspection of Room 5228 adj to Riser 62A-63A Mini-Containment Work Area B. IHT notes area free of visible ACM dust and debris. Hillian supervisor informs IHT that Hillian worker did not encounter any TSI fittings. Deemed satisfactory. Hillian authorized to encapsulate work area.

1410: IHT conducts pre-commencement inspection of Room 5226 adj to Riser 63A-64A Mini-Containment Work Area A. IHT notes that Hillian has set up a Mini-Containment, with single layer Critical Barrier, Drop Layer of Poly, AFD in operation, signs & DCON bucket in place. Deemed satisfactory Hillian authorized to commence demolition & decontamination operations in Mini-Containment A.

1500: IHT conduct pre-sealant inspection of Room 5226 adj to Riser 63A-64A Mini-Containment Work Area A. IHT notes area free of visible ACM dust and debris. Hillian supervisor informs IHT that Hillian worker did not encounter any TSI fittings. Deemed satisfactory. Hillian authorized to encapsulate work area.

**Comments**

ACM Class I demolition and decontamination operations in proceeded without incident. PCM air sample analysis preformed: IHT reported no elevated sample results: All area samples outside 5<sup>TH</sup> Floor 5226 - 5236 Even Rooms Risers 54A to 64A Mini-Containment Work Area's A, B, C, D, E, F, & G reported airborne fiber

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Signature of Inspector/Project Monitor:  Date: 24 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 24 Feb 01	

concentration levels below 0.01 fibers/cc. IHT notes that a significant amount of PCM area samples located inside the various work areas were overloaded. IHT recommends that Hillian employ an airless sprayer during demolition operations.

PCM post abatement air sample analysis performed: IHT reported no elevated sample results: All area samples inside 5<sup>TH</sup> Floor 5226 - 5236 Even Rooms Risers 54A to 64A Mini-Containment Work Area's A, B, C, D, E, F, & G work areas reported airborne fiber concentration levels below 0.01 fibers/cc. Deemed Satisfactory. IHT authorizes Hillian to tear down 5<sup>TH</sup> Floor 5226 - 5236 Even Rooms Risers 54A to 64A Mini-Containment Work Area's A, B, C, D, E, F, & G.

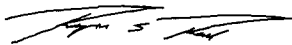
Signature of Inspector/Project Monitor:  Date: 24 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**Industrial Hygiene Technologies, Inc.**

Environmental &amp; Industrial Hygiene Consultants

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 24 Feb 01	

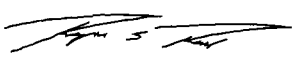
 <b>Microscopist:</b> _____ (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-022401-01RR	REM	New Executive Office Building: Hall adj to Room 4220	3.0	3.0	7:32 AM	12:02 PM	270	810	1.5	<0.004
2534-022401-02RR	REM	New Executive Office Building: Room 6228	3.0	3.0	7:28 AM	11:58 AM	270	810	3.0	<0.004
2534-022401-03RR	REM	New Executive Office Building: Hall adj to Room 5218	5.0	5.0	7:26 AM	11:56 AM	270	1350	6.0	<0.003
2534-022401-04RR	REM	New Executive Office Building: Hall adj to Room 5234	5.0	5.0	7:25 AM	11:55 AM	270	1350	7.5	0.003
2534-022401-05RR	DCON	New Executive Office Building: Room 5236 adj to Riser 56A-59A Work Area E DCON Clean Room	10.0	10.0	7:02 AM	9:22 AM	140	1400	11.0	0.004

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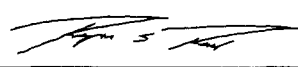
Signature of Inspector/Project Monitor:  Date: 24 Feb 01Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 24 Feb 01	

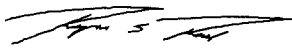
 <b>PCM SAMPLE LOG</b>										
Microscopist: _____ (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-022401-06RR	CB	New Executive Office Building: Room 5236 adj to Riser 56A-59A Work Area E critical barrier adj to DCON	10.0	10.0	7:02 AM	9:22 AM	140	1400	9.0	0.003
2534-022401-07RR	STA	New Executive Office Building: Room 5236 adj to Riser 56A-59A Work Area E inside Mini-Containment	3.0	3.0	7:11 AM	9:31 AM	140	420	Particle Overload	Sample Void
2534-022401-08RR	DCON	New Executive Office Building: Room 5236 adj to Riser 55A Work Area F DCON Clean Room	10.0	10.0	7:06 AM	9:56 AM	170	1700	15.5	0.004
2534-022401-09RR	CB	New Executive Office Building: Room 5236 adj to Riser 55A Work Area F critical barrier adj to DCON	10.0	10.0	7:06 AM	9:56 AM	170	1700	9.5	0.003

Page 8 of 13

Signature of Inspector/Project Monitor:  Date: 24 Feb 01Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 24 Feb 01	

 <b>PCM SAMPLE LOG</b>										
Microscopist: _____ (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-022401-10RR	STA	New Executive Office Building: Room 5236 adj to Riser 55A Work Area F DCON Clean Room	3.0	3.0	7:12 AM	9:57 AM	165	495	Particle Overload	Sample Void
2534-022401-11RR	DCON	New Executive Office Building: Room 5236 adj to Riser 54A Work Area G critical barrier adj to DCON	10.0	10.0	7:09 AM	10:07 AM	178	1780	17.5	0.005
2534-022401-12RR	CB	New Executive Office Building: Room 5236 adj to Riser 54A Work Area G inside Mini-Containment	10.0	10.0	7:09 AM	10:07 AM	178	1780	13.5	0.004
2534-022401-13RR	STA	New Executive Office Building: Room 5236 adj to Riser 54A Work Area G inside Mini-Containment	3.0	3.0	7:13 AM	10:13 AM	180	540	36.0	0.033

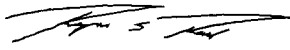
Page 9 of 13

Signature of Inspector/Project Monitor:  Date: 24 Feb 01Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)



**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 24 Feb 01	

<div style="text-align: center;">   <b>PCM SAMPLE LOG</b> </div>										
Microscopist: _____ (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-022401-14RR	DCON	New Executive Office Building: Room 5236 adj to Riser 60A Work Area D DCON Clean Room	10.0	10.0	9:24 AM	11:14 AM	110	1100	14.5	0.006
2534-022401-15RR	CB	New Executive Office Building: Room 5236 adj to Riser 60A Work Area D critical barrier adj to DCON	10.0	10.0	9:24 AM	11:14 AM	110	1100	8.5	0.004
2534-022401-16RR	STA	New Executive Office Building: Room 5236 adj to Riser 60A Work Area D inside Mini-Containment	3.0	3.0	9:21 AM	11:11 AM	110	330	35.5	0.053
2534-022401-17RR	REM	New Executive Office Building: Hall adj to Room 4220	3.0	3.0	12:02 PM	3:32 PM	210	630	1.5	<0.005
2534-022401-18RR	REM	New Executive Office Building: Room 6227	3.0	3.0	11:58 AM	3:32 PM	214	642	2.0	<0.005

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Signature of Inspector/Project Monitor:  Date: 24 Feb 01

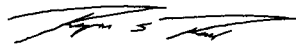
Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**Industrial Hygiene Technologies, Inc.**

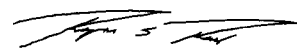
Environmental &amp; Industrial Hygiene Consultants

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 24 Feb 01	

 <b>PCM SAMPLE LOG</b>										
Microscopist: _____ (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-022401-19RR	REM	New Executive Office Building: Hall adj to Room 5218	5.0	5.0	11:56 AM	3:26 PM	210	1050	5.0	<0.003
2534-022401-20RR	REM	New Executive Office Building: Hall adj to Room 5234	5.0	5.0	11:55 AM	3:25 PM	210	1050	6.5	<0.003
2534-022401-21RR	DCON	New Executive Office Building: Room 5230 adj to Riser 60A-61A Work Area C DCON Clean Room	10.0	10.0	10:32 AM	12:12 PM	100	1000	14.5	0.007
2534-022401-22RR	CB	New Executive Office Building: Room 5230 adj to Riser 60A-61A Work Area C critical barrier adj to DCON	10.0	10.0	10:32 AM	12:12 PM	100	1000	10.5	0.005
2534-022401-23RR	STA	New Executive Office Building: Room 5230 adj to Riser 60A-61A Work Area C inside Mini-Containment	3.0	3.0	10:28 AM	12:08 PM	100	300	Particle Overload	Sample Void

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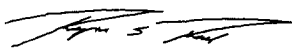
Signature of Inspector/Project Monitor:  Date: 24 Feb 01Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**Industrial Hygiene Technologies, Inc.**

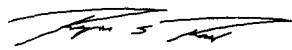
Environmental &amp; Industrial Hygiene Consultants

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 24 Feb 01	

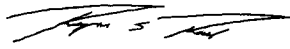
<b>PCM SAMPLE LOG</b>										
Microscopist:  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-022401-24RR	DCON	New Executive Office Building: Room 5228 adj to Riser 62A-63A Work Area B DCON Clean Room	10.0	10.0	10:56 AM	12:16 PM	80	800	14.0	0.009
2534-022401-25RR	CB	New Executive Office Building: Room 5228 adj to Riser 62A-63A Work Area B critical barrier adj to DCON	10.0	10.0	10:56 AM	12:16 PM	80	800	7.0	0.004
2534-022401-26RR	STA	New Executive Office Building: Room 5228 adj to Riser 62A-63A Work Area B inside Mini-Containment	3.0	3.0	10:28 AM	12:18 PM	110	330	20.5	0.030
2534-022401-27RR	DCON	New Executive Office Building: Room 5226 adj to Riser 63A -64A Work Area A DCON Clean Room	10.0	10.0	1:51 PM	3:06 PM	75	750	13.5	0.009

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Signature of Inspector/Project Monitor:  Date: 24 Feb 01Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 24 Feb 01	

 <b>PCM SAMPLE LOG</b>										
Microscopist: _____ (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-022401-28RR	CB	New Executive Office Building: Room 5226 adj to Riser 63A -64A Work Area A critical barrier adj to DCON	10.0	10.0	1:51 PM	3:06 PM	75	750	10.0	0.007
2534-022401-29RR	STA	New Executive Office Building: Room 5226 adj to Riser 63A -64A Work Area A inside Mini-Containment	3.0	3.0	1:06 PM	3:06 PM	120	360	36.5	0.050

Page 13 of 13

Signature of Inspector/Project Monitor:  Date: 24 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**PRE-ABATEMENT CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG		<b>ORDER NUMBER:</b> P-11-01-DC-0101		<b>CONTRACT NUMBER:</b> GS11P00MQD0098		<b>ACT NUMBER:</b> PO2642534	
<b>BUILDING:</b> New Executive Office Bldg:				<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC			
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project				<b>DATE:</b> 24 Feb 01			
<b>REMOVAL CONTRACTOR:</b> Hillian				<b>MONITORING CONTRACTOR:</b>			
<b>CONTRACTOR SUPERVISOR:</b> Juan A. Giron				INDUSTRIAL HYGIENE TECHNOLOGIES, INC.			
				<b>TIME START:</b> 0615		<b>TIME COMPLETE:</b> 1815	
<b>ABATEMENT SCOPE OF WORK:</b> Prep work for potential Class I removal operations							
<b>TYPE OF ASBESTOS MATERIAL TO BE ABATED</b>		<b>Category 1 Friable</b>		<b>QTY. OF ASBESTOS MATERIAL TO BE ABATED</b>		Unknown	
<b>OSHA ACTIVITY CLASSIFICATION</b>	<b>CLASS I</b>	<b>X</b>	<b>CLASS II</b>		<b>CLASS III</b>	<b>X</b>	<b>CLASS IV</b>
<b>INSPECTION CATEGORY</b>	<b>ACTIVITY TO BE CHECKED</b>				<b>WITHIN LIMITS</b>	<b>DEVIATION</b>	
<b>WORK SITE ISOLATION</b>	BARRIER TAPE TO ISOLATE STAGING AREA AND DECON				N/A		
	FULL CONTAINMENT				MINI		
	NEGATIVE PRESSURE -0.02 MINIMUM				X		
	FOUR AIR CHANGES PER HOUR				X		
	CRITICAL BARRIERS INTACT (DUCTS, WINDOWS, DOORS, ALL PENETRATIONS)				X		
	FLOOR COVERED				X		
	WALLS COVERED				X		
	AREA VENTILATION OFF & VENTS COVERED				X		
	GLOVEBAGS SMOKE TESTED AND FOUND SATISFACTORY				N/A		
<b>SIGNAGE</b>	CAUTION SIGNS AT STAGING AREA				X		
	OSHA SIGN (ASBESTOS) AT ENTRANCES TO WORK AREA				X		
	WASTE CONTAINERS LABELED PER NESHAP & GENERATOR				X		
	HVAC SYSTEM TAGGED OUT				X		
	NO SMOKING, EATING OR DRINKING IN THE WORK AREA				X		

Signature of Inspector/Project Monitor:  Date: 24 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**PRE-ABATEMENT CHECKLIST & LOG**

<b>CLIENT: GSA, NCR, SDS, WPYG</b>	<b>ORDER NUMBER: P-11-01-DC-0101</b>	<b>CONTRACT NUMBER: GS11P00MQD0098</b>	<b>ACT NUMBER: PO2642534</b>
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 24 Feb 01	

MARK W/ X, MARK NA IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG			
INSPECTION CATEGORY	ACTIVITY TO BE CHECKED	WITHIN LIMITS	DEVIATION
<b>INSPECTION</b>	HIGH-SPEED ABRASIVE DISC SAWS, COMPRESSED AIR, DRY SWEEPING, SHOVELING, EMPLOYEE ROTATION - NOT TO BE USED	X	
	LABELED WASTE CONTAINERS ON SITE	X	
	HEPA VACUUM FOUND WORKING AND ACCEPTABLE	X	
	ACCESS TO WATER FOR WET METHODS	X	
	AIRLESS SPRAYER WORKING AND IN WORK AREA	X	
<b>WORKER PROTECTION</b>	DISPOSABLE COVERALLS & BOOT COVERS	X	
	PROPER NIOSH RESPIRATORS TYPE RESPIRATOR: <u>1/2 face APR</u> FILTER: <u>P-100</u>	X	
	HEAD PROTECTION		NO
	EYE PROTECTION		NO
<b>SHOWERS</b>	FUNCTIONING		N/A
	HOT AND COLD RUNNING WATER		N/A
	WATER COLLECTION / FILTERING DEVICE FUNCTIONAL	X	
<b>WORK HABITS</b>	HOUSE KEEPING - MATERIALS AND EQUIPMENT STORED. LOCKERS AND PERSONAL ITEM CONTAINERS	X	
<b>SAFETY MEETING</b>	COMPETENT PERSON HAS CONDUCTED A SAFETY MEETING	X	
<b>BASELINE MONITORING</b>	BASELINE MONITORING CONDUCTED PRIOR TO START OF PREPARATIONS	X	
<b>PROJECT DESIGN</b>	PROJECT DESIGN ON SITE, AND ALL PREPARATIONS COMPLETED IN ACCORDANCE WITH DESIGN	X	
<b>DOCUMENTS</b>	NOTIFICATION, PERMIT, ABATEMENT PLAN, CONTRACTOR LICENSE, SUPERVISOR LICENSE, WORKER LICENSE, TRAINING, & MEDICAL, FIT TEST DOCUMENTATION ON SITE AND IN ORDER	X	

Signature of Inspector/Project Monitor:  Date: 24 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

# **Industrial Hygiene Technologies, Inc.**

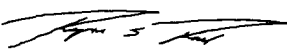
*Environmental & Industrial Hygiene Consultants*

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 24 Feb 01	

MARK W/ X, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG
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See **Asbestos Abatement Monitoring Checklist and Log of Events-** for details concerning project.

Page 3 of 3

Signature of Inspector/Project Monitor:  Date: 24 Feb 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

## **PROJECT PROGRESS / CLOSEOUT REPORT**

**Site Name:** New Executive Office Building

**Project Name:** Fan Coil Unit Replacement Project - Chilled Water / Hot Water Supply Line Access Door Installation, Asbestos Hazard Reduction

**Work Area Location:** 5<sup>th</sup> Floor 5208 - 5216, Risers 37A to 39A, 71A to 80A, Work Areas A, B, C, D, E, F, & G

**Order Number:** P-11-01-DC-0107      **Contract Number:** GS11P00MQD0098      **ACT Number:** PO2642534

**Project Date (s):** March 2,3, 2001

**Sampling Conducted:** Pre-abatement, Area, Work Area, Remote, and Final Clearance Monitoring - PCM Analysis (NIOSH 7400 Method)

**Project Description:** Industrial Hygiene Technologies, Inc. (IHT) was retained to conduct asbestos abatement project monitoring and design conformance control during the demolition of perimeter walls to allow for future installation of perimeter wall plumbing access doors associated with the New Executive Office Building Fan Coil Unit replacement Project.

Hillian Brothers, Inc. was retained to erect mini-negative pressure enclosures to be used in the demolition of perimeter plaster walls, cleaning of plumbing chases, and removal of asbestos TSI, as encountered. Known asbestos hazards associated with this project include over-spray / delaminated spray applied asbestos fire retardant, cementitious fittings, pipe insulation, and contaminated debris. Hillian Brothers is utilizing asbestos engineering controls to ensure demolition activities which may disturb friable asbestos materials and contaminated debris within the chases, do not contaminate adjacent office areas. When encountered, asbestos is removed using wet methods. Regardless of the existence of asbestos TSI on plumbing, each chase area is presumed to be contaminated with asbestos fire retardant, and decontaminated.



**Project Description  
Continued:**

Work began at 6:45 pm, March 2, 2001. Preparation of the work area, and pre-abatement monitoring were conducted. All work was conducted as per abatement plan, with the exception of fan coil unit decontamination. Fan coil units are protected and covered during these operations. Work to clean fan coil units will take place during another phase of the project.

The following work shift began at 6:15am, March 3, 2001 and involved lock-out / tag-out of the HVAC systems, additional preparations, demolition of perimeter walls, decontamination of wall chases, and removal of cementitious fittings.

IHT conducted sampling in each of 7 mini-containments (A, B, C, D, E, F, &G), within each separate office, at AFD Exhaust, remotely within adjacent hallways, outside the work area, and on the floors above and below. The sampling plan was developed by Mark Sovich, Michael MacCabe, and Ryan Reed during a pre-work walkthrough conducted February 9, 2001. The sampling plan involves assessment of each functional area of abatement, within the control areas, staging areas, AFD exhaust, and remotely such that the "sampling train" is sufficient to rapidly assess and delineate fiber migration, should a fiber release episode occur during the operation. Immediate analysis of samples mid and end of shift is conducted to ensure safety of un-protected workers outside of the control area, and rapid response to fiber release.

Work was completed and contractors fully demobilized by 5:30 PM 03/03/01. All work was completed as per modified scope of work / abatement plan, with no elevated fiber concentrations reported outside of the control area. Final clearance was achieved within each NPE with all results reported below 0.01 F/cc.

**Deviations:**

The GSA scope of work specifies cleaning of the Fan Coil Units. This work will be conducted during a future phase of the project. Due to the size of each mini-containment, 2 final clearance samples were utilized to clear each containment. This is a deviation from the GSA clearance protocol, but in conformance with District of Columbia Asbestos Regulation. Deviation was taken as the change was in compliance with applicable regulations, provided adequate assessment for completion, facilitated timely project completion, and provided significant overall cost savings for the client.

**Asbestos Removed:**

Overspray and fire retardant debris was removed from each wall penetration. Each pipe chase penetration, and 7 NPE's were fully decontaminated and encapsulated. A total of 20 cementitious fittings were removed.

**Additional Notes:**

Installation of access hatch doors took place after encapsulation, prior to final clearance. Access hatches were then closed, and final clearance requested. IHT suggested keeping doors to access hatches open during final clearance. This would allow for clearing the entire work area. However, Grunley Walsh Superintendent, Pablo Quinteros indicated that the GSA scope of work dictates closing of access hatches prior to clearance testing.

IHT advises that closing doors to access hatches during clearance, precludes the hatch areas from inclusion in results of clearance. Therefore, the interior hatch area should not be considered cleared for re-occupancy.

The entire work area should be cleared for re-occupancy, or mechanical work to follow abatement, be conducted by trained and protected staff.

If the final clearance procedure is to continue to involve closing of access hatch doors, future work in the hatch should involve use of PPE, and development of negative exposure assessment. Such work should be conducted by individuals with current medicals, respiratory protection training, and site specific asbestos awareness / engineering control training. Upon obtaining a negative exposure assessment for such work, PPE may be waived and work continue by individuals with asbestos awareness training. Periodic monitoring should continue, on a scheduled routine basis.

## ABATEMENT FINAL INSPECTION CHECKLIST & LOG

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

<b>REMOVAL CONTRACTOR:</b> Hillian	<b>MONITORING CONTRACTOR:</b>		
<b>CONTRACTOR SUPERVISOR:</b> Silvio Argueta	INDUSTRIAL HYGIENE TECHNOLOGIES, INC.		
	<table style="width: 100%;"> <tr> <td style="width: 50%;"><b>TIME START:</b> 0615</td> <td style="width: 50%;"><b>TIME COMPLETE:</b> 1730</td> </tr> </table>	<b>TIME START:</b> 0615	<b>TIME COMPLETE:</b> 1730
<b>TIME START:</b> 0615	<b>TIME COMPLETE:</b> 1730		

**ABATEMENT SCOPE OF WORK:** Demolition, Decontamination w/ possible TSI removal

<b>TYPE OF ASBESTOS MATERIAL ABATED</b>	N/A	<b>QTY. OF ASBESTOS MATERIAL ABATED</b>	N/A
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<b>OSHA ACTIVITY CLASSIFICATION</b>	CLASS I		CLASS II		CLASS III		CLASS IV	
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**DESCRIBE SPECIFIC WORK AREA INSPECTED:** NEOB: 5<sup>TH</sup> Floor 5208 & 5216 Risers 37A-39A to 71A-80A Mini-Containment Work Area's A, B, C, D, E, F, & G.

**TOTAL SQUARE FOOTAGE OF WORK AREA:** 7 Mini-Containments (E- 100ft<sup>2</sup>) (G- 60ft<sup>2</sup>) (F -20ft<sup>2</sup>) (D- 40ft<sup>2</sup>) (C- 40ft<sup>2</sup>) (B- 40ft<sup>2</sup>) (A -40ft<sup>2</sup>)

**FINAL CLEARANCE (AHERA, PCM, NIOSH 7402, AGGRESSIVE):** PCM

INSPECTION CATEGORY	ACTIVITY TO BE CHECKED	WITHIN LIMITS	PROBLEMS ENCOUNTERED
Residual Dust / Debris	Floor	YES	
	Horizontal Surfaces	YES	
	Pipes	YES	
	Ventilation Equip.	YES	
	Ductwork	N/A	
	Registers	N/A	
	Lights	N/A	
	Other	N/A	

(The above questions are to be answered "YES" or "Problem Encountered Noted".)

See **Asbestos Abatement Monitoring Checklist and Log of Events- Daily Log of Events** for details concerning project.

Page 1 of 5

Signature of Inspector/Project Monitor:  Date: 03 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**Industrial Hygiene Technologies, Inc.**  
Environmental & Industrial Hygiene Consultants

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

<div style="display: flex; justify-content: space-between;"> <div>Microscopist: _____ (sign)</div> <div><b>PCM SAMPLE LOG</b></div> </div>										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-030301-30RR	POST	New Executive Office Building: Room 5216 adj to Riser 39A Work Area G inside Mini-Containment	10.0	10.0	11:49 AM	1:49 PM	120	1200	10.0	0.004
2534-030301-31RR	POST	New Executive Office Building: Room 5216 adj to Riser 39A Work Area G inside Mini-Containment	10.0	10.0	11:49 AM	1:49 PM	120	1200	9.5	0.004
2534-030301-32RR	POST	New Executive Office Building: Room 5216 adj to Riser 38A -37A 80A-79A Work Area A inside Mini-Containment	10.0	10.0	11:53 AM	1:53 PM	120	1200	11.5	0.005
2534-030301-33RR	POST	New Executive Office Building: Room 5216 adj to Riser 38A -37A 80A-79A Work Area A inside Mini-Containment	10.0	10.0	11:53 AM	1:53 PM	120	1200	7.5	0.003

Page 2 of 5

Signature of Inspector/Project Monitor: \_\_\_\_\_ Date: 03 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ABATEMENT FINAL INSPECTION CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

<b>PCM SAMPLE LOG</b>										
<b>Microscopist:</b> _____ (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-030301-34RR	POST	New Executive Office Building: Room 5216 adj to Riser 79A-77A Work Area B inside Mini-Containment	10.0	10.0	11:57 AM	1:57 PM	120	1200	3.5	<0.003
2534-030301-35RR	POST	New Executive Office Building: Room 5216 adj to Riser 79A-77A Work Area B inside Mini-Containment	10.0	10.0	11:57 AM	1:57 PM	120	1200	4.0	<0.003
2534-030301-36RR	POST	New Executive Office Building: Room 5208 adj to Riser 77A-75A Work Area C inside Mini-Containment	10.0	10.0	1:59 PM	3:59 PM	120	1200	2.0	<0.003

Page 3 of 5

Signature of Inspector/Project Monitor: \_\_\_\_\_ Date: 03 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ABATEMENT FINAL INSPECTION CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

PCM SAMPLE LOG										
Microscopist: _____ (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-030301-37RR	POST	New Executive Office Building: Room 5208 adj to Riser 77A-75A Work Area C inside Mini-Containment	10.0	10.0	1:59 PM	3:59 PM	120	1200	1.5	<0.003
2534-030301-38RR	POST	New Executive Office Building: Room 5208 adj to Riser 74A Work Area D inside Mini-Containment	10.0	10.0	2:01 PM	4:01 PM	120	1200	6.0	<0.003
2534-030301-39RR	POST	New Executive Office Building: Room 5208 adj to Riser 74A Work Area D inside Mini-Containment	10.0	10.0	2:01 PM	4:01 PM	120	1200	7.5	0.003
2534-030301-40RR	POST	New Executive Office Building: Room 5208 adj to Riser 72A-73A Work Area E inside Mini-Containment	10.0	10.0	2:03 PM	4:03 PM	120	1200	4.5	<0.003

Page 4 of 5

Signature of Inspector/Project Monitor: \_\_\_\_\_ Date: 03 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ABATEMENT FINAL INSPECTION CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

<div style="display: flex; justify-content: space-between;"> <div> <b>Microscopist:</b> _____ (sign) </div> <div> <b>PCM SAMPLE LOG</b> </div> </div>										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-030301-41RR	POST	New Executive Office Building: Room 5208 adj to Riser 72A-73A Work Area E inside Mini-Containment	10.0	10.0	2:03 PM	4:03 PM	120	1200	3.0	<0.003
2534-030301-42RR	POST	New Executive Office Building: Room 5208 adj to Riser 71A-72A Work Area F inside Mini-Containment	10.0	10.0	2:23 PM	4:23 PM	120	1200	1.5	<0.003
2534-030301-43RR	POST	New Executive Office Building: Room 5208 adj to Riser 71A-72A Work Area F inside Mini-Containment	10.0	10.0	2:23 PM	4:23 PM	120	1200	1.0	<0.003

Page 5 of 5

Signature of Inspector/Project Monitor: \_\_\_\_\_ Date: 03 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

## ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

<b>REMOVAL CONTRACTOR:</b> Hillian		<b>MONITORING CONTRACTOR:</b> INDUSTRIAL HYGIENE TECHNOLOGIES, INC.	
<b>CONTRACTOR SUPERVISOR:</b> Silvio Argueta			
<b>TIME ON SITE:</b> 0630	<b>TIME OFF SITE:</b> 1730	<b>TIME ON SITE:</b> 0615	<b>TIME OFF SITE:</b> 1730

**ABATEMENT SCOPE OF WORK:** Demolition, Decontamination w/ TSI removal

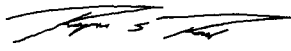
**GENERAL SHIFT WORK PLAN:** (7) Mini-Containments w/ Non-ACM demolition & ACM decontamination

**TYPE AND QUANTITY OF ASBESTOS REMOVED THIS SHIFT:** (20) ACM Hard Plaster Fitting on Elbows

<b>OSHA ACTIVITY CLASSIFICATION</b>	<b>CLASS I</b>	<b>X</b>	<b>CLASS II</b>		<b>CLASS III</b>	<b>X</b>	<b>CLASS IV</b>	
-------------------------------------	----------------	----------	-----------------	--	------------------	----------	-----------------	--

INSPECTION CATEGORY	ACTIVITY TO BE CHECKED	WITHIN LIMITS	PROBLEMS ENCOUNTERED
<b>WORK SITE ISOLATION</b>	BARRIER TAPE	N/A	
	FULL CONTAINMENT	Mini(s)	
	NEGATIVE PRESSURE -0.02 MINIMUM	X	
	FOUR AIR CHANGES PER HOUR	X	
	FLOOR COVERED	X	
	WALLS COVERED	X	
	CRITICAL BARRIERS INTACT	X	
	AREA VENTILATION OFF & VENTS COVERED	X	
	NEGATIVE PRESSURE GLOVEBAG USED	N/A	
<b>SIGNAGE</b>	CAUTION SIGNS AT STAGING AREA	X	
	OSHA SIGN (ASBESTOS) AT ENTRANCES TO WORK AREA	X	
	WASTE CONTAINERS LABELED PER NESHAP & GENERATOR	X	
	HVAC TAG OUT	X	

**MARK W/ X - EXPLAIN IN NOTES, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG**

Signature of Inspector/Project Monitor:  Date: 03 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

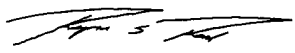


**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW, Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

INSPECTION CATEGORY	ACTIVITY TO BE CHECKED	WITHIN LIMITS	PROBLEMS ENCOUNTERED
WORK PRACTICES	HIGH-SPEED TOOLS, COMPRESSED AIR, DRY SWEEPING, SHOVELING, EMPLOYEE ROTATION NOT IN USE	X	
	REMOVED MATERIAL PROPERLY BAGGED	X	
	WASTE REMOVED PRIOR TO SHIFT END	X	
	HEPA VACUUM IN USE	X	
	MATERIAL KEPT WET / USE OF WET METHODS	X	
	AIRLESS SPRAYER IN USE	X (Hudson Sprayer)	
	OSHA COMPLIANT GLOVEBAG PROCEDURE	N/A	
WORKER PROTECTION	DISPOSABLE CLOTHING USED ONCE	X	
	PROPER NIOSH RESPIRATORS TYPE RESPIRATOR: _____ FILTER: ½ Face APR P-100	X	
	PROPER DECON SEQUENCE FOLLOWED	X	
SHOWERS	FUNCTIONING	N/A	
	HOT AND COLD RUNNING WATER	N/A	
	USED EACH DEPARTURE	X	
	WATER COLLECTED & FILTERED PROPERLY	X	
WORK HABITS IN WORK AREA	NO SMOKING, EATING OR DRINKING IN THE WORK AREA	X	
DOCUMENTS	NOTIFICATION, PERMIT, ABATEMENT PLAN, CONTRACTOR LICENSE, SUPERVISOR LICENSE, WORKER LICENSE, TRAINING, & MEDICAL, FIT TEST DOCUMENTATION ON SITE AND IN ORDER	X	

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Signature of Inspector/Project Monitor:  Date: 03 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
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<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

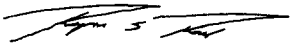
**MARK W/ X - EXPLAIN IN NOTES, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG**

**DAILY LOG OF EVENTS**

**Remediation Activities**

- 0615: Hillian on site New Executive Office Building 725 17<sup>TH</sup> Street NW Washington DC . Silvio Argueta, Hillian superintendent informs IHT that Hillian shall be commencing demolition and decontamination operations with the potential for ACM Class I removal operations using Mini-Containments, hand tools, and wet methods. These removal activities are to occur in 5<sup>TH</sup> Floor 5208 & 5216 Risers 37A-39A to 71A-80A Mini-Containment Work Area's A, B, C, D, E, F, & G. Hillian has been contracted to cut out (20) 2'x2' sections of non-ACM plaster wall per riser at the general location of the fittings associated with the Fan Coil Unit with a Mini-Containment. Spray-On Surfacing material is located above the position of the cut and there is the possibility of TSI hard plaster fittings on the elbows. Hillian has been contracted to conduct decontamination operations for Spray-On Surfacing Material Debris and possible TSI fitting removal once the access panels have been cut. All debris to be disposed of as regulated ACM waste in EPA approved landfill.
- 0645: Hillian workers mobilize and continue prepwork in 5<sup>TH</sup> Floor 5208 & 5216 Risers 37A-39A to 71A-80A Mini-Containment Work Area's A, B, C, D, E, F, & G.
- 0720: IHT reviews Hillian Brothers paperwork ie. (DC licenses, training, physicals, and fit tests). Deemed satisfactory
- 0730: Hillian workers commence demolition operations in Room 5216 adj to Riser 38A -37A 80A-79A Work Area A; Room 5216 adj to Riser 79A-77A Work Area B: & Room 5216 adj to Riser 39A Work Area G.
- 1000: IHT notes that during encapsulation of Room 5216 adj to Riser 39A Work Area G Hillian supervisor encapsulated inside the cut out hole in the wall, and installed the access hatch thus isolating the work area. IHT discusses the issue with Grunley-Walsh Superintendent Pablo Quinteros. IHT points out that by isolating the section of the work area behind the wall, that section was never subjected to clearance sampling. Grunley-Walsh Superintendent states that procedure was in place and that it set up was to insure that spray-on insulation behind the wall on the ceiling does not impact clearance sampling. IHT's position is that the section behind the wall will not be subjected to clearance sampling and not clear for re-occupancy. Therefore, when subsequent work occurs behind the wall, workers will be entering a "contaminated" work area with the need for workers to don PPE at least until a proper Negative Exposure Assessment is completed.
- 1300: Hillian workers complete demolition and decontamination operations in 5<sup>TH</sup> Floor Room 5208 adj to Riser 71A-72A Work Area F. Hillian informs IHT that Hillian encountered a total of (20) TSI fittings.
- 1315-1430: Hillian Break

Page 3 of 13

Signature of Inspector/Project Monitor:  Date: 03 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

1730: Hillian departed the site.

**Sampling**

0615: IHT on site to perform area air monitoring and abatement quality control.

0700: IHT began sampling.

1730: IHT completed sampling. IHT off site.

**Inspections**

0705-0730: IHT conducts pre-commencement inspection of Room 5216 adj to Riser 38A -37A 80A-79A Work Area A; Room 5216 adj to Riser 79A-77A Work Area B; and Room 5216 adj to Riser 39A Work Area G. IHT notes that Hillian has set up a Mini-Containment, with single layer Critical Barrier, Drop Layer of Poly, AFD in operation, signs & DCON bucket in place. Deemed satisfactory Hillian authorized to commence demolition & decontamination operations in Mini-Containment A, B & G.

0825: IHT conduct pre-sealant inspection of Room 5216 adj to Riser 38A -37A 80A-79A Work Area A. IHT notes area free of visible ACM dust and debris. Hillian supervisor informs IHT that Hillian workers encountered (5) TSI fittings. Deemed satisfactory. Hillian authorized to encapsulate work area.

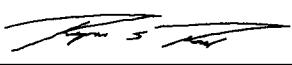
0835: IHT conduct pre-sealant inspection of Room 5216 adj to Riser 39A Work Area G. IHT notes area free of visible ACM dust and debris. Hillian supervisor informs IHT that Hillian workers encountered (1) TSI fitting. Deemed satisfactory. Hillian authorized to encapsulate work area.

0905: IHT conducts pre-commencement inspection of Room 5208 adj to Riser 77A-75A Work Area C. IHT notes that Hillian has set up a Mini-Containment, with single layer Critical Barrier, Drop Layer of Poly, AFD in operation, signs & DCON bucket in place. Deemed satisfactory Hillian authorized to commence demolition & decontamination operations in Mini-Containment C.

0915: IHT conducts pre-commencement inspection of Room 5208 adj to Riser 74A Work Area D. IHT notes that Hillian has set up a Mini-Containment, with single layer Critical Barrier, Drop Layer of Poly, AFD in operation, signs & DCON bucket in place. Deemed satisfactory Hillian authorized to commence demolition & decontamination operations in Mini-Containment D.

0955: IHT conduct pre-sealant inspection of Room 5216 adj to Riser 79A-77A Work Area B. IHT notes area free of visible ACM dust and debris. Hillian supervisor informs IHT that Hillian workers encountered (4) TSI fittings. Deemed satisfactory. Hillian authorized to encapsulate work area.

Page 4 of 13

Signature of Inspector/Project Monitor:  Date: 03 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

- 1050: IHT conducts pre-commencement inspection of Room 5208 adj to Riser 72A-73A Work Area E. IHT notes that Hillian has set up a Mini-Containment, with single layer Critical Barrier, Drop Layer of Poly, AFD in operation, signs & DCON bucket in place. Deemed satisfactory Hillian authorized to commence demolition & decontamination operations in Mini-Containment E.
- 1120: IHT conduct pre-sealant inspection of Room 5208 adj to Riser 77A-75A Work Area C. IHT notes area free of visible ACM dust and debris. Hillian supervisor informs IHT that Hillian workers encountered (2) TSI fittings. Deemed satisfactory. Hillian authorized to encapsulate work area.
- 1125: IHT conduct pre-sealant inspection of Room 5208 adj to Riser 74A Work Area D. IHT notes area free of visible ACM dust and debris. Hillian supervisor informs IHT that Hillian workers encountered no TSI fittings. Deemed satisfactory. Hillian authorized to encapsulate work area.
- 1140: IHT conducts pre-commencement inspection of Room 5208 adj to Riser 71A-72A Work Area F. IHT notes that Hillian has set up a Mini-Containment, with single layer Critical Barrier, Drop Layer of Poly, AFD in operation, signs & DCON bucket in place. Deemed satisfactory Hillian authorized to commence demolition & decontamination operations in Mini-Containment F.
- 1235: IHT conduct pre-sealant inspection of Room 5208 adj to Riser 72A-73A Work Area E. IHT notes area has a minor amount of visible ACM dust and debris on Mini-Containment floor and Brick wall. Hillian worker performs necessary fine cleaning. Hillian supervisor informs IHT that Hillian workers encountered (6) TSI fittings. Deemed satisfactory. Hillian authorized to encapsulate work area.
- 1300: IHT conduct pre-sealant inspection of Room 5208 adj to Riser 71A-72A Work Area F. IHT notes area free of visible ACM dust and debris. Hillian supervisor informs IHT that Hillian workers encountered (2) TSI fittings. Deemed satisfactory. Hillian authorized to encapsulate work area.

**Comments**

ACM Class I demolition and decontamination operations in proceeded without incident. PCM air sample analysis preformed: IHT reported no elevated sample results: All area samples outside 5<sup>TH</sup> Floor 5208 & 5216 Risers 37A-39A to 71A-80A Mini-Containment Work Area's A, B, C, D, E, F, & G reported airborne fiber concentration levels below 0.01 fibers/cc. IHT notes that a significant amount of PCM area samples located inside the various work areas were overloaded. IHT recommends that Hillian employ an airless sprayer during demolition operations.

PCM post abatement air sample analysis preformed: IHT reported no elevated sample results: All area samples inside 5<sup>TH</sup> Floor 5208 & 5216 Risers 37A-39A to 71A-80A Mini-Containment Work Area's A, B, C, D, E, F, & G reported airborne fiber concentration levels below 0.01 fibers/cc. Deemed Satisfactory. IHT authorizes Hillian to tear down 5<sup>TH</sup> Floor 5208 & 5216 Risers 37A-39A to 71A-80A Mini-Containment Work Area's A, B, C, D, E, F, & G. Note: Clearance to work areas does not apply to behind hatches inside wall. Area

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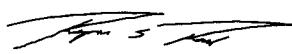
Signature of Inspector/Project Monitor:  Date: 03 March 01Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

still deemed contaminated.


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Signature of Inspector/Project Monitor:  Date: 03 March 01

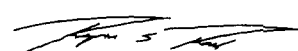
Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**Industrial Hygiene Technologies, Inc.**  
Environmental & Industrial Hygiene Consultants

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

<div style="display: flex; justify-content: space-between;"> <div>Microscopist:  (sign)</div> <div>PCM SAMPLE LOG</div> </div>										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-030301-01RR	REM	New Executive Office Building: Hall adj to Room 4212	3.0	3.0	7:22 AM	11:42 AM	260	780	0.5	<0.004
2534-030301-02RR	REM	New Executive Office Building: Room 6216	3.0	3.0	7:19 AM	11:39 AM	260	780	3.5	<0.004
2534-030301-03RR	REM	New Executive Office Building: Hall adj to Room 5212	5.0	5.0	7:16 AM	11:46 AM	270	1350	15.5	0.006
2534-030301-04RR	REM	New Executive Office Building: Hall adj to Room 5206	5.0	5.0	7:17 AM	11:47 AM	270	1350	22.0	0.008
2534-030301-05RR	DCON	New Executive Office Building: Room 5216 adj to Riser 39A Work Area G DCON Clean Room	10.0	10.0	7:01 AM	8:31 AM	90	900	11.5	0.006

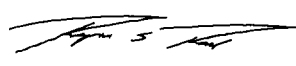
Page 7 of 13

Signature of Inspector/Project Monitor:  Date: 03 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

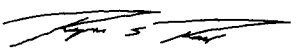
 <b>Microscopist:</b> _____ (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-030301-06RR	CB	New Executive Office Building: Room 5216 adj to Riser 39A Work Area G critical barrier adj to DCON	10.0	10.0	7:01 AM	8:31 AM	90	900	8.5	0.005
2534-030301-07RR	STA	New Executive Office Building: Room 5216 adj to Riser 39A Work Area G inside Mini-Containment	3.0	3.0	7:04 AM	8:34 AM	90	270	40.5	0.074
2534-030301-08RR	DCON	New Executive Office Building: Room 5216 adj to Riser 38A -37A 80A-79A Work Area A DCON Clean Room	10.0	10.0	7:12 AM	8:22 AM	70	700	13.0	0.009
2534-030301-09RR	CB	New Executive Office Building: Room 5216 adj to Riser 38A -37A 80A-79A Work Area A critical barrier adj to DCON	10.0	10.0	7:12 AM	8:22 AM	70	700	10.5	0.007

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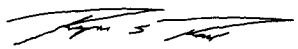
Signature of Inspector/Project Monitor:  Date: 03 March 01Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

## ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

PCM SAMPLE LOG										
Microscopist:  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-030301-10RR	STA	New Executive Office Building: Room 5216 adj to Riser 38A -37A 80A-79A Work Area A DCON Clean Room	3.0	3.0	7:04 AM	8:24 AM	80	240	Particle Overload	Sample Void
2534-030301-11RR	DCON	New Executive Office Building: Room 5216 adj to Riser 79A-77A Work Area B critical barrier adj to DCON	10.0	10.0	7:08 AM	9:48 AM	160	1600	18.5	0.006
2534-030301-12RR	CB	New Executive Office Building: Room 5216 adj to Riser 79A-77A Work Area B inside Mini-Containment	10.0	10.0	7:08 AM	9:48 AM	160	1600	9.0	0.003
2534-030301-13RR	STA	New Executive Office Building: Room 5216 adj to Riser 79A-77A Work Area B inside Mini-Containment	3.0	3.0	7:04 AM	9:54 AM	170	510	48.5	0.047

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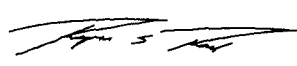
Signature of Inspector/Project Monitor:  Date: 03 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)



**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

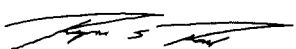
<b>PCM SAMPLE LOG</b>										
Microscopist:  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-030301-14RR	DCON	New Executive Office Building: Room 5208 adj to Riser 77A-75A Work Area C DCON Clean Room	10.0	10.0	9:13 AM	11:23 AM	130	1300	14.5	0.005
2534-030301-15RR	CB	New Executive Office Building: Room 5208 adj to Riser 77A-75A Work Area C critical barrier adj to DCON	10.0	10.0	9:13 AM	11:23 AM	130	1300	9.0	0.003
2534-030301-16RR	STA	New Executive Office Building: Room 5208 adj to Riser 77A-75A Work Area C inside Mini-Containment	3.0	3.0	9:09 AM	11:24 AM	135	405	34.0	0.041
2534-030301-17RR	REM	New Executive Office Building: Hall adj to Room 4212	3.0	3.0	11:42 AM	2:42 PM	180	540	1.0	<0.006
2534-030301-18RR	REM	New Executive Office Building: Room 6216	3.0	3.0	11:39 AM	2:39 PM	180	540	2.0	<0.006

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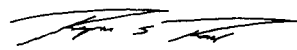
Signature of Inspector/Project Monitor:  Date: 03 March 01Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

<div style="text-align: center;">   <b>PCM SAMPLE LOG</b> </div>										
Microscopist: _____ (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-030301-19RR	REM	New Executive Office Building: Hall adj to Room 5212	5.0	5.0	11:46 AM	2:46 PM	180	900	9.5	0.005
2534-030301-20RR	REM	New Executive Office Building: Hall adj to Room 5206	5.0	5.0	11:47 AM	2:47 PM	180	900	12.5	0.007
2534-030301-21RR	DCON	New Executive Office Building: Room 5208 adj to Riser 74A Work Area D DCON Clean Room	10.0	10.0	9:17 AM	11:27 AM	130	1300	15.0	0.006
2534-030301-22RR	CB	New Executive Office Building: Room 5208 adj to Riser 74A Work Area D critical barrier adj to DCON	10.0	10.0	9:17 AM	11:27 AM	130	1300	10.0	0.004
2534-030301-23RR	STA	New Executive Office Building: Room 5208 adj to Riser 74A Work Area D inside Mini-Containment	3.0	3.0	9:09 AM	11:29 AM	140	420	29.5	0.034

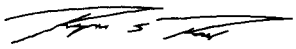
Page 11 of 13

Signature of Inspector/Project Monitor:  Date: 03 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

## ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

<div style="display: flex; justify-content: space-between;"> <div>Microscopist:  (sign)</div> <div><b>PCM SAMPLE LOG</b></div> </div>										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-030301-24RR	DCON	New Executive Office Building: Room 5208 adj to Riser 72A-73A Work Area E DCON Clean Room	10.0	10.0	10:53 AM	12:33 PM	100	1000	14.5	0.007
2534-030301-25RR	CB	New Executive Office Building: Room 5208 adj to Riser 72A-73A Work Area E critical barrier adj to DCON	10.0	10.0	10:53 AM	12:33 PM	100	1000	8.0	0.004
2534-030301-26RR	STA	New Executive Office Building: Room 5208 adj to Riser 72A-73A Work Area E inside Mini-Containment	3.0	3.0	10:48 AM	12:38 PM	110	330	23.0	0.034
2534-030301-27RR	DCON	New Executive Office Building: Room 5208 adj to Riser 71A-72A Work Area F DCON Clean Room	10.0	10.0	11:36 AM	12:56 PM	80	800	9.5	0.006

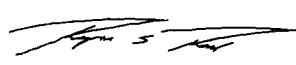
Page 12 of 13

Signature of Inspector/Project Monitor:  Date: 03 March 01


Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

<b>PCM SAMPLE LOG</b>										
<b>Microscopist:</b>  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-030301-28RR	CB	New Executive Office Building: Room 5208 adj to Riser 71A-72A Work Area F critical barrier adj to DCON	10.0	10.0	11:36 AM	12:56 PM	80	800	7.0	0.004
2534-030301-29RR	STA	New Executive Office Building: Room 5208 adj to Riser 71A-72A Work Area F inside Mini-Containment	3.0	3.0	11:37 AM	12:57 PM	80	240	19.0	0.039

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Signature of Inspector/Project Monitor:  Date: 03 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**PRE-ABATEMENT CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

<b>REMOVAL CONTRACTOR:</b> Hillian				<b>MONITORING CONTRACTOR:</b> INDUSTRIAL HYGIENE TECHNOLOGIES, INC.			
<b>CONTRACTOR SUPERVISOR:</b> Silvio Argueta							
				<b>TIME START:</b> 0615		<b>TIME COMPLETE:</b> 1730	
<b>ABATEMENT SCOPE OF WORK:</b> Prep work for potential Class I removal operations							
<b>TYPE OF ASBESTOS MATERIAL TO BE ABATED</b>		<b>Category 1 Friable</b>		<b>QTY. OF ASBESTOS MATERIAL TO BE ABATED</b>		Unknown	
<b>OSHA ACTIVITY CLASSIFICATION</b>	<b>CLASS I</b>	<b>X</b>	<b>CLASS II</b>		<b>CLASS III</b>	<b>X</b>	<b>CLASS IV</b>
<b>INSPECTION CATEGORY</b>	<b>ACTIVITY TO BE CHECKED</b>					<b>WITHIN LIMITS</b>	<b>DEVIATION</b>
<b>WORK SITE ISOLATION</b>	BARRIER TAPE TO ISOLATE STAGING AREA AND DECON					N/A	
	FULL CONTAINMENT					MINI	
	NEGATIVE PRESSURE -0.02 MINIMUM					X	
	FOUR AIR CHANGES PER HOUR					X	
	CRITICAL BARRIERS INTACT (DUCTS, WINDOWS, DOORS, ALL PENETRATIONS)					X	
	FLOOR COVERED					X	
	WALLS COVERED					X	
	AREA VENTILATION OFF & VENTS COVERED					X	
	GLOVEBAGS SMOKE TESTED AND FOUND SATISFACTORY					N/A	
<b>SIGNAGE</b>	CAUTION SIGNS AT STAGING AREA					X	
	OSHA SIGN (ASBESTOS) AT ENTRANCES TO WORK AREA					X	
	WASTE CONTAINERS LABELED PER NESHAP & GENERATOR					X	
	HVAC SYSTEM TAGGED OUT					X	
	NO SMOKING, EATING OR DRINKING IN THE WORK AREA					X	

Page 1 of 3

Signature of Inspector/Project Monitor:  Date: 03 March 01Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**PRE-ABATEMENT CHECKLIST & LOG**

<b>CLIENT: GSA, NCR, SDS, WPYG</b>	<b>ORDER NUMBER: P-11-01-DC-0101</b>	<b>CONTRACT NUMBER: GS11P00MQD0098</b>	<b>ACT NUMBER: PO2642534</b>
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

MARK W/ X, MARK NA IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG			
INSPECTION CATEGORY	ACTIVITY TO BE CHECKED	WITHIN LIMITS	DEVIATION
<b>INSPECTION</b>	HIGH-SPEED ABRASIVE DISC SAWS, COMPRESSED AIR, DRY SWEEPING, SHOVELING, EMPLOYEE ROTATION - NOT TO BE USED	X	
	LABELED WASTE CONTAINERS ON SITE	X	
	HEPA VACUUM FOUND WORKING AND ACCEPTABLE	X	
	ACCESS TO WATER FOR WET METHODS	X	
	AIRLESS SPRAYER WORKING AND IN WORK AREA	X	
<b>WORKER PROTECTION</b>	DISPOSABLE COVERALLS & BOOT COVERS	X	
	PROPER NIOSH RESPIRATORS TYPE RESPIRATOR: <u>1/2 face APR</u> FILTER: <u>P-100</u>	X	
	HEAD PROTECTION		NO
	EYE PROTECTION		NO
<b>SHOWERS</b>	FUNCTIONING		N/A
	HOT AND COLD RUNNING WATER		N/A
	WATER COLLECTION / FILTERING DEVICE FUNCTIONAL	X	
<b>WORK HABITS</b>	HOUSE KEEPING - MATERIALS AND EQUIPMENT STORED. LOCKERS AND PERSONAL ITEM CONTAINERS	X	
<b>SAFETY MEETING</b>	COMPETENT PERSON HAS CONDUCTED A SAFETY MEETING	X	
<b>BASELINE MONITORING</b>	BASELINE MONITORING CONDUCTED PRIOR TO START OF PREPARATIONS	X	
<b>PROJECT DESIGN</b>	PROJECT DESIGN ON SITE, AND ALL PREPARATIONS COMPLETED IN ACCORDANCE WITH DESIGN	X	
<b>DOCUMENTS</b>	NOTIFICATION, PERMIT, ABATEMENT PLAN, CONTRACTOR LICENSE, SUPERVISOR LICENSE, WORKER LICENSE, TRAINING, & MEDICAL, FIT TEST DOCUMENTATION ON SITE AND IN ORDER	X	

Signature of Inspector/Project Monitor:  Date: 03 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

# **Industrial Hygiene Technologies, Inc.**

Environmental & Industrial Hygiene Consultants

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 03 March 01	

MARK W/ X, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG

See **Asbestos Abatement Monitoring Checklist and Log of Events-** for details concerning project.

Page 3 of 3

Signature of Inspector/Project Monitor:  Date: 03 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**PRE-ABATEMENT CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 02 March 01	

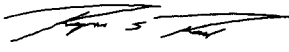
<b>REMOVAL CONTRACTOR:</b> Hillian Brothers	<b>MONITORING CONTRACTOR:</b> INDUSTRIAL HYGIENE TECHNOLOGIES, INC.	
<b>CONTRACTOR SUPERVISOR:</b> Silvio Argueta		
	<b>TIME START:</b> 1845	<b>TIME COMPLETE:</b> 2215

**ABATEMENT SCOPE OF WORK:** Prep work for Class I removal operations

<b>TYPE OF ASBESTOS MATERIAL TO BE ABATED</b>	<b>Category 1 Friable</b>	<b>QTY. OF ASBESTOS MATERIAL TO BE ABATED</b>	Unknown
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<b>OSHA ACTIVITY CLASSIFICATION</b>	<b>CLASS I</b>	<b>X</b>	<b>CLASS II</b>		<b>CLASS III</b>		<b>CLASS IV</b>	
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<b>INSPECTION CATEGORY</b>	<b>ACTIVITY TO BE CHECKED</b>	<b>WITHIN LIMITS</b>	<b>DEVIATION</b>
<b>WORK SITE ISOLATION</b>	BARRIER TAPE TO ISOLATE STAGING AREA AND DECON		X- Prep Work
	FULL CONTAINMENT		X- Prep Work
	NEGATIVE PRESSURE -0.02 MINIMUM		X- Prep Work
	FOUR AIR CHANGES PER HOUR		X- Prep Work
	CRITICAL BARRIERS INTACT (DUCTS, WINDOWS, DOORS, ALL PENETRATIONS)		X- Prep Work
	FLOOR COVERED		X- Prep Work
	WALLS COVERED		X- Prep Work
	AREA VENTILATION OFF & VENTS COVERED		X- Prep Work
	GLOVEBAGS SMOKE TESTED AND FOUND SATISFACTORY		X- Prep Work
<b>SIGNAGE</b>	CAUTION SIGNS AT STAGING AREA		X- Prep Work
	OSHA SIGN (ASBESTOS) AT ENTRANCES TO WORK AREA		X- Prep Work
	WASTE CONTAINERS LABELED PER NESHAP & GENERATOR		X- Prep Work
	HVAC SYSTEM TAGGED OUT		X- Prep Work
	NO SMOKING, EATING OR DRINKING IN THE WORK AREA		X- Prep Work

Signature of Inspector/Project Monitor:  Date: 02 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

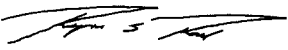


## PRE-ABATEMENT CHECKLIST & LOG

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 02 March 01	

MARK W/ X, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG			
INSPECTION CATEGORY	ACTIVITY TO BE CHECKED	WITHIN LIMITS	DEVIATION
<b>INSPECTION</b>	HIGH-SPEED ABRASIVE DISC SAWS, COMPRESSED AIR, DRY SWEEPING, SHOVELING, EMPLOYEE ROTATION - NOT TO BE USED		X- Prep Work
	LABELED WASTE CONTAINERS ON SITE		X- Prep Work
	HEPA VACUUM FOUND WORKING AND ACCEPTABLE		X- Prep Work
	ACCESS TO WATER FOR WET METHODS		X- Prep Work
	AIRLESS SPRAYER WORKING AND IN WORK AREA		X- Prep Work
<b>WORKER PROTECTION</b>	DISPOSABLE COVERALLS & BOOT COVERS		X- Prep Work
	PROPER NIOSH RESPIRATORS TYPE RESPIRATOR: _____ FILTER: _____		X- Prep Work
	HEAD PROTECTION		X- Prep Work
	EYE PROTECTION		X- Prep Work
<b>SHOWERS</b>	FUNCTIONING		X- Prep Work
	HOT AND COLD RUNNING WATER		X- Prep Work
	WATER COLLECTION / FILTERING DEVICE FUNCTIONAL		X- Prep Work
<b>WORK HABITS</b>	HOUSE KEEPING - MATERIALS AND EQUIPMENT STORED. LOCKERS AND PERSONAL ITEM CONTAINERS	X	
<b>SAFETY MEETING</b>	COMPETENT PERSON HAS CONDUCTED A SAFETY MEETING	X	
<b>BASELINE MONITORING</b>	BASELINE MONITORING CONDUCTED PRIOR TO START OF PREPARATIONS	X	
<b>PROJECT DESIGN</b>	PROJECT DESIGN ON SITE, AND ALL PREPARATIONS COMPLETED IN ACCORDANCE WITH DESIGN	X	
<b>DOCUMENTS</b>	NOTIFICATION, PERMIT, ABATEMENT PLAN, CONTRACTOR LICENSE, SUPERVISOR LICENSE, WORKER LICENSE, TRAINING, & MEDICAL, FIT TEST DOCUMENTATION ON SITE AND IN ORDER	X	

Page 2 of 7

Signature of Inspector/Project Monitor: \_\_\_\_\_  Date: 02 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

## PRE-ABATEMENT CHECKLIST & LOG

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 02 March 01	
MARK W/ X, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG			

## DAILY LOG OF EVENTS

### Remediation Activities

1845: Hillian on site New Executive Office Building 725 17<sup>TH</sup> Street NW Washington DC . Silvio Argueta, Hillian superintendent informs IHT that Hillian shall be commencing prepwork for ACM Class I removal operations using Mini-Containments, hand tools, and wet methods. These removal activities are to occur in 5<sup>TH</sup> Floor 5208 & 5216 Risers 37A-39A to 71A-80A Mini-Containment Work Area's A, B, C, D, E, F, & G.

1935: Hillian workers mobilize and commence prepwork in 5<sup>TH</sup> Floor 5208 & 5216 Risers 37A-39A to 71A-80A Mini-Containment Work Area's A, B, C, D, E, F, & G.

2145: Hillian workers halt prep work operations. Hillian to return to site tomorrow 2/24/01 @ 6:30AM to continue prepwork operations and commence demolition and decontamination with potential TSI fitting removal.

2200: Hillian departed the site.

### Sampling

1830: IHT on site to perform area air monitoring and abatement quality control.

1920: IHT began sampling.

2200: IHT completed sampling. IHT off site.

### Inspections

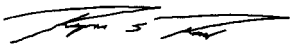
No inspections necessary.

### Comments

Hillian Prepwork operations proceeded without incident.

PCM pre abatement air sample analysis preformed: IHT reported no elevated sample results: All area samples reported airborne fiber concentration levels below 0.01 fibers/cc. Deemed Satisfactory.

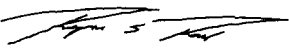
Page 3 of 7

Signature of Inspector/Project Monitor:  Date: 02 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**Industrial Hygiene Technologies, Inc.**  
Environmental & Industrial Hygiene Consultants

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 02 March 01	

<div>  <b>PCM SAMPLE LOG</b> </div>										
<b>Microscopist:</b> _____ <div>(sign)</div>										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-030201-01RR	PRE	New Executive Office Building: Hall adj to Room 5206	10.0	10.0	7:36 PM	9:36 PM	120	1200	10.5	0.004
2534-030201-02RR	PRE	New Executive Office Building: Hall adj to Room 5212	10.0	10.0	7:34 PM	9:34 PM	120	1200	8.0	0.003
2534-030201-03RR	PRE	New Executive Office Building: Room 5216 adj to Riser 38A -37A 80A-79A Work Area A	10.0	10.0	7:43 PM	9:43 PM	120	1200	19.0	0.008
2534-030201-04RR	PRE	New Executive Office Building: Room 5216 adj to Riser 38A -37A 80A-79A Work Area A	10.0	10.0	7:43 PM	9:43 PM	120	1200	17.0	0.007
2534-030201-05RR	PRE	New Executive Office Building: Room 5216 adj to Riser 79A-77A Work Area B	10.0	10.0	7:39 PM	9:39 PM	120	1200	15.5	0.006

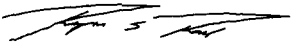
Page 4 of 7

Signature of Inspector/Project Monitor:  Date: 02 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**PRE-ABATEMENT CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 02 March 01	

<div style="text-align: center;">   <b>PCM SAMPLE LOG</b> </div>										
Microscopist: _____ (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-030201-06RR	PRE	New Executive Office Building: Room 5216 adj to Riser 79A-77A Work Area B	10.0	10.0	7:39 PM	9:39 PM	120	1200	13.5	0.006
2534-030201-07RR	PRE	New Executive Office Building: Room 5208 adj to Riser 77A-75A Work Area C	10.0	10.0	7:55 PM	9:55 PM	120	1200	14.0	0.006
2534-030201-08RR	PRE	New Executive Office Building: Room 5208 adj to Riser 77A-75A Work Area C	10.0	10.0	7:55 PM	9:55 PM	120	1200	16.0	0.007
2534-030201-09RR	PRE	New Executive Office Building: Room 5208 adj to Riser 74A Work Area D	10.0	10.0	7:54 PM	9:54 PM	120	1200	13.5	0.006

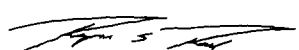
Page 5 of 7

Signature of Inspector/Project Monitor: \_\_\_\_\_ Date: 02 March 01

Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**PRE-ABATEMENT CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 02 March 01	

<div style="display: flex; justify-content: space-between;"> <div>Microscopist:  (sign)</div> <div><b>PCM SAMPLE LOG</b></div> </div>										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-030201-10RR	PRE	New Executive Office Building: Room 5208 adj to Riser 74A Work Area D	10.0	10.0	7:54 PM	9:54 PM	120	1200	14.5	0.006
2534-030201-11RR	PRE	New Executive Office Building: Room 5208 adj to Riser 72A-73A Work Area E	10.0	10.0	7:51 PM	9:51 PM	120	1200	16.0	0.007
2534-030201-12RR	PRE	New Executive Office Building: Room 5208 adj to Riser 72A-73A Work Area E	10.0	10.0	7:51 PM	9:51 PM	120	1200	15.0	0.006
2534-030201-13RR	PRE	New Executive Office Building: Room 5208 adj to Riser 71A-72A Work Area F	10.0	10.0	7:52 PM	9:52 PM	120	1200	18.0	0.007

Page 6 of 7

Signature of Inspector/Project Monitor:  Date: 02 March 01

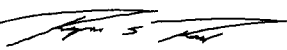
Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

**Industrial Hygiene Technologies, Inc.**

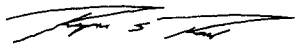
Environmental &amp; Industrial Hygiene Consultants

**PRE-ABATEMENT CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 02 March 01	

 <b>Microscopist:</b> _____ (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-030201-14RR	PRE	New Executive Office Building: Room 5208 adj to Riser 71A-72A Work Area F	10.0	10.0	7:52 PM	9:52 PM	120	1200	12.0	0.005
2534-030201-15RR	PRE	New Executive Office Building: Room 5216 adj to Riser 39A Work Area G	10.0	10.0	7:45 PM	9:45 PM	120	1200	19.0	0.008
2534-030201-16RR	PRE	New Executive Office Building: Room 5216 adj to Riser 39A Work Area G	10.0	10.0	7:45 PM	9:45 PM	120	1200	17.5	0.007

Page 7 of 7

Signature of Inspector/Project Monitor:  Date: 02 March 01Project Monitor: Ryan S. Reed Training Cert./ License No: 01-0104  
(Print/Type) (Print/Type)

## **PROJECT PROGRESS / CLOSEOUT REPORT**

**Site Name:** New Executive Office Building

**Project Name:** Fan Coil Unit Replacement Project - Chilled Water / Hot Water Supply Line Access Door Installation, Asbestos Hazard Reduction

**Work Area Location:** 5<sup>TH</sup> Floor Room 5208 Risers 64A - 70A and 5217 Risers A41 and 40, Mini-Containment work areas A, B, C, D, E, & F

**Order Number:** P-11-01-DC-0107      **Contract Number:** GS11P00MQD0098      **ACT Number:** PO2642534

**Project Date (s):** March 9,10, 2001

**Sampling Conducted:** Pre-abatement, Area, Work Area, Remote, and Final Clearance Monitoring - PCM Analysis (NIOSH 7400 Method)

**Project Description:** Industrial Hygiene Technologies, Inc. (IHT) was retained to conduct asbestos abatement project monitoring and design conformance control during the demolition of perimeter walls to allow for future installation of perimeter wall plumbing access doors associated with the New Executive Office Building Fan Coil Unit replacement Project.

Hillian Brothers, Inc. was retained to erect mini-negative pressure enclosures to be used in the demolition of perimeter plaster walls, cleaning of plumbing chases, and removal of asbestos TSI, as encountered. Known asbestos hazards associated with this project include over-spray / delaminated spray applied asbestos fire retardant, cementitious fittings, pipe insulation, and contaminated debris. Hillian Brothers is utilizing asbestos engineering controls to ensure demolition activities which may disturb friable asbestos materials and contaminated debris within the chases, do not contaminate adjacent office areas. When encountered, asbestos is removed using wet methods. Regardless of the existence of asbestos TSI on plumbing, each chase area is presumed to be contaminated with asbestos fire retardant, and decontaminated.

**Project Description  
Continued:**

Work began at 6:45 pm, March 9, 2001. Preparation of the work area, and pre-abatement monitoring were conducted. All work was conducted as per abatement plan, with the exception of fan coil unit decontamination. Fan coil units are protected and covered during these operations. Work to clean fan coil units will take place during another phase of the project.

The following work shift began at 6:15am, March 10, 2001 and involved lock-out / tag-out of the HVAC systems, additional preparations, demolition of perimeter walls, decontamination of wall chases, and removal of cementitious fittings.

IHT conducted sampling in each of 6 mini-containments (A, B, C, D, E, & F), within each separate office, at AFD Exhaust, remotely within adjacent hallways, outside the work area, and on the floors above and below. The sampling plan was developed by Mark Sovich, Michael MacCabe, and Ryan Reed during a pre-work walkthrough conducted February 9, 2001. The sampling plan involves assessment of each functional area of abatement, within the control areas, staging areas, AFD exhaust, and remotely such that the "sampling train" is sufficient to rapidly assess and delineate fiber migration, should a fiber release episode occur during the operation. Immediate analysis of samples mid and end of shift is conducted to ensure safety of un-protected workers outside of the control area, and rapid response to fiber release.

Work was completed and asbestos contractor fully completed with abatement work by 4:45 PM 03/10/01. All work was completed as per modified scope of work / abatement plan, with no elevated fiber concentrations reported outside of the control area. Final clearance was achieved within each NPE with all results reported below 0.01 F/cc.

**Deviations:**

The GSA scope of work specifies cleaning of the Fan Coil Units. This work will be conducted during a future phase of the project. Due to the size of each mini-containment, 2 final clearance samples were utilized to clear each containment. This is a deviation from the GSA clearance protocol, but in conformance with District of Columbia Asbestos Regulation. Deviation was taken as the change was in compliance with applicable regulations, provided adequate assessment for completion, facilitated timely project completion, and provided significant overall cost savings for the client.



**Asbestos Removed:** Overspray and fire retardant debris was removed from each wall penetration. Each pipe chase penetration, and 6 NPE's were fully decontaminated and encapsulated.

**Additional Notes:** Installation of access hatch doors took place after encapsulation, prior to final clearance. Access hatches were opened, and final clearance requested.

## PRE-ABATEMENT CHECKLIST & LOG

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Building		<b>LOCATION:</b> 725 17 <sup>th</sup> Street NW, Washington, D.C.	
<b>PROJECT:</b> 5 <sup>th</sup> Floor Fan Coil Replacement Project		<b>DATE:</b> 09 March 01	

<b>REMOVAL CONTRACTOR:</b> Hillian				<b>MONITORING CONTRACTOR:</b> INDUSTRIAL HYGIENE TECHNOLOGIES, INC.			
<b>CONTRACTOR SUPERVISOR:</b>  Juan				<b>TIME START:</b> 1845		<b>TIME COMPLETE:</b> 2215	
<b>ABATEMENT SCOPE OF WORK:</b> Prep Work for Class I removal operations							
<b>TYPE OF ASBESTOS MATERIAL TO BE ABATED</b>		Friable		<b>QTY. OF ASBESTOS MATERIAL TO BE ABATED</b>		Unknown	
<b>OSHA ACTIVITY CLASSIFICATION</b>	<b>CLASS I</b>	<b>X</b>	<b>CLASS II</b>		<b>CLASS III</b>		<b>CLASS IV</b>
<b>INSPECTION CATEGORY</b>	<b>ACTIVITY TO BE CHECKED</b>					<b>WITHIN LIMITS</b>	<b>DEVIATION</b>
<b>WORK SITE ISOLATION</b>	BARRIER TAPE TO ISOLATE STAGING AREA AND DECON						X- Prep Work
	FULL CONTAINMENT						X- Prep Work
	NEGATIVE PRESSURE -0.02 MINIMUM						X- Prep Work
	FOUR AIR CHANGES PER HOUR						X- Prep Work
	CRITICAL BARRIERS INTACT (DUCTS, WINDOWS, DOORS, ALL PENETRATIONS)						X- Prep Work
	FLOOR COVERED						X- Prep Work
	WALLS COVERED						X- Prep Work
	AREA VENTILATION OFF & VENTS COVERED						X- Prep Work
	GLOVEBAGS SMOKE TESTED AND FOUND SATISFACTORY						X- Prep Work
<b>SIGNAGE</b>	CAUTION SIGNS AT STAGING AREA						X- Prep Work
	OSHA SIGN (ASBESTOS) AT ENTRANCES TO WORK AREA						X- Prep Work
	WASTE CONTAINERS LABELED PER NESHAP & GENERATOR						X- Prep Work
	HVAC SYSTEM TAGGED OUT						X- Prep Work
	NO SMOKING, EATING OR DRINKING IN THE WORK AREA						X- Prep Work
MARK W/ X, MARK NA IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG							

Page 1 of 7

Signature of Inspector/Project Monitor:  Date: 09 March 01  
 Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)

## PRE-ABATEMENT CHECKLIST & LOG

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Building		<b>LOCATION:</b> 725 17 <sup>th</sup> Street NW, Washington, D.C.	
<b>PROJECT:</b> 5 <sup>th</sup> Floor Fan Coil Replacement Project		<b>DATE:</b> 09 March 01	

INSPECTION CATEGORY	ACTIVITY TO BE CHECKED	WITHIN LIMITS	DEVIATION
<b>INSPECTION</b>	HIGH-SPEED ABRASIVE DISC SAWS, COMPRESSED AIR, DRY SWEEPING, SHOVELING, EMPLOYEE ROTATION - NOT TO BE USED		X- Prep Work
	LABELED WASTE CONTAINERS ON SITE		X- Prep Work
	HEPA VACUUM FOUND WORKING AND ACCEPTABLE		X- Prep Work
	ACCESS TO WATER FOR WET METHODS		X- Prep Work
	AIRLESS SPRAYER WORKING AND IN WORK AREA		X- Prep Work
<b>WORKER PROTECTION</b>	DISPOSABLE COVERALLS & BOOT COVERS		X- Prep Work
	PROPER NIOSH RESPIRATORS TYPE RESPIRATOR: _____ FILTER: _____		X- Prep Work
	HEAD PROTECTION		X- Prep Work
	EYE PROTECTION		X- Prep Work
<b>SHOWERS</b>	FUNCTIONING		X- Prep Work
	HOT AND COLD RUNNING WATER		X- Prep Work
	WATER COLLECTION / FILTERING DEVICE FUNCTIONAL		X- Prep Work
<b>WORK HABITS</b>	HOUSE KEEPING - MATERIALS AND EQUIPMENT STORED. LOCKERS AND PERSONAL ITEM CONTAINERS	X	
<b>SAFETY MEETING</b>	COMPETENT PERSON HAS CONDUCTED A SAFETY MEETING	X	
<b>BASELINE MONITORING</b>	BASELINE MONITORING CONDUCTED PRIOR TO START OF PREPARATIONS	X	
<b>PROJECT DESIGN</b>	PROJECT DESIGN ON SITE, AND ALL PREPARATIONS COMPLETED IN ACCORDANCE WITH DESIGN	X	
<b>DOCUMENTS</b>	NOTIFICATION, PERMIT, ABATEMENT PLAN, CONTRACTOR LICENSE, SUPERVISOR LICENSE, WORKER LICENSE, TRAINING, & MEDICAL, FIT TEST DOCUMENTATION ON SITE AND IN ORDER	X	
MARK W/ X, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG			

Signature of Inspector/Project Monitor:  Date: 09 March 01  
 Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)

**PRE-ABATEMENT CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Building		<b>LOCATION:</b> 725 17 <sup>th</sup> Street NW, Washington, D.C.	
<b>PROJECT:</b> 5 <sup>th</sup> Floor Fan Coil Replacement Project		<b>DATE:</b> 09 March 01	

**DAILY LOG OF EVENTS**

**Remediation Activities**

- 1845: Hillian on site. Hillian supervisor informs IHT that Hillian shall be commencing prepwork for ACM Class I removal operations using Mini-Containments, hand tools, and wet methods. These removal activities are to occur in 5<sup>th</sup> floor rooms 5208 Risers 64A - 70A and 5217 Risers A41 and 40, Mini-Containment work areas A, B, C, D, E, & F.
- 1915: Hillian workers mobilize and commence prep work on 5<sup>th</sup> floor.
- 2145: Hillian workers halt prep work operations. Hillian to return to site tomorrow 3/9/01 @ 6:30AM to continue prep work operations and commence TSI fitting removal.
- 2200: Hillian departed the site.

**Sampling**

- 1830: IHT on site to perform area air monitoring and abatement quality control.
- 1950: IHT begins sampling.
- 2200: IHT completed sampling. IHT offsite.

**Inspections**

No inspections necessary.

**Comments**

Mini-containment preparation went without incident. Two of the pre-abatement samples, work area C, were above 0.01f/cc. This was most likely caused by prep work stirring up dust.

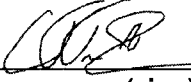
Page 3 of 7

Signature of Inspector/Project Monitor:  Date: 09March 01  
Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)


**Industrial Hygiene Technologies, Inc.**

Environmental &amp; Industrial Hygiene Consultants

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Building		<b>LOCATION:</b> 725 17 <sup>th</sup> Street NW, Washington, D.C.	
<b>PROJECT:</b> 5 <sup>th</sup> Floor Fan Coil Replacement Project		<b>DATE:</b> 09 March 01	

<b>PCM SAMPLE LOG</b>										
Microscopist:  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-030901-01CT	PRE	New Executive Office Building: Hall adjacent to room 5218	10.0	10.0	8:05 PM	9:50 PM	105	1050	4.0	<0.003
2534-030901-02CT	PRE	New Executive Office Building: Hall adjacent to room 5230	10.0	10.0	8:05 PM	9:50 PM	105	1050	4.5	<0.003
2534-030901-03CT	PRE	New Executive Office Building: Room 5208: Risers 69A and 70A Inside area A	10.0	10.0	8:10 PM	9:55 PM	105	1050	6.0	<0.003
2534-030901-04CT	PRE	New Executive Office Building: Room 5208: Risers 69A and 70A Inside area A	10.0	10.0	8:10 PM	9:55 PM	105	1050	6.5	<0.003
2534-030901-05CT	PRE	New Executive Office Building: Room 5208: Risers 67A and 68A Inside area B	10.0	10.0	8:10 PM	9:55 PM	105	1050	7.5	0.004

Page 4 of 7


Signature of Inspector/Project Monitor:  Date: 09 March 01  
Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)

**Industrial Hygiene Technologies, Inc.**


Environmental &amp; Industrial Hygiene Consultants

**PRE-ABATEMENT CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Building		<b>LOCATION:</b> 725 17 <sup>th</sup> Street NW, Washington, D.C.	
<b>PROJECT:</b> 5 <sup>th</sup> Floor Fan Coil Replacement Project		<b>DATE:</b> 09 March 01	


<b>PCM SAMPLE LOG</b>										
Microscopist:  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-030901-06CT	PRE	New Executive Office Building: Room 5208: Risers 67A and 68A Inside area B	10.0	10.0	8:10 PM	9:55 PM	105	1050	8.0	0.004
2534-030901-07CT	PRE	New Executive Office Building: Room 5208: Risers 66A Inside area C	10.0	10.0	8:10 PM	9:55 PM	105	1050	26.0	0.012
2534-030901-08CT	PRE	New Executive Office Building: Room 5208: Risers 66A Inside area C	10.0	10.0	8:10 PM	9:55 PM	105	1050	22.5	0.011
2534-030901-09CT	PRE	New Executive Office Building: Room 5208: Risers 64A and 65A Inside area D	10.0	10.0	8:10 PM	9:55 PM	105	1050	13.0	0.006

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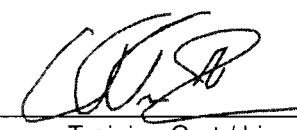
Signature of Inspector/Project Monitor:  Date: 09 March 01  
Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)

**PRE-ABATEMENT CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Building		<b>LOCATION:</b> 725 17 <sup>th</sup> Street NW, Washington, D.C.	
<b>PROJECT:</b> 5 <sup>th</sup> Floor Fan Coil Replacement Project		<b>DATE:</b> 09 March 01	


<div style="display: flex; justify-content: space-between;"> <div>Microscopist:  (sign)</div> <div><b>PCM SAMPLE LOG</b></div> </div>										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-030901-10CT	PRE	New Executive Office Building: Room 5208: Risers 64A and 65A Inside area D	10.0	10.0	8:10 PM	9:55 PM	105	1050	8.5	0.004
2534-030901-11CT	PRE	New Executive Office Building: Room 5217: Riser A41 Inside area E	10.0	10.0	8:05 PM	9:50 PM	105	1050	3.0	<0.003
2534-030901-12CT	PRE	New Executive Office Building: Room 5217: Riser A41 Inside area E	10.0	10.0	8:05 PM	9:50 PM	105	1050	4.5	<0.003
2534-030901-13CT	PRE	New Executive Office Building: Room 5217: Riser A40 Inside area F	10.0	10.0	8:05 PM	9:50 PM	105	1050	5.5	<0.003


Page 6 of 7

Signature of Inspector/Project Monitor:  Date: 09 March 01  
Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)

**PRE-ABATEMENT CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Building		<b>LOCATION:</b> 725 17 <sup>th</sup> Street NW, Washington, D.C.	
<b>PROJECT:</b> 5 <sup>th</sup> Floor Fan Coil Replacement Project		<b>DATE:</b> 09 March 01	

PCM SAMPLE LOG										
Microscopist:  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-030901-14CT	PRE	New Executive Office Building: Room 5217: Riser A40 Inside area F	10.0	10.0	8:05 PM	9:50 PM	105	1050	4.0	<0.003


Signature of Inspector/Project Monitor:  Date: 09March 01  
Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)



**PRE-ABATEMENT CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 10 March 01	

<b>REMOVAL CONTRACTOR:</b> Hillian				<b>MONITORING CONTRACTOR:</b> INDUSTRIAL HYGIENE TECHNOLOGIES, INC.			
<b>CONTRACTOR SUPERVISOR:</b> Silvio Argueta							
				<b>TIME START:</b> 0615		<b>TIME COMPLETE:</b> 1700	
<b>ABATEMENT SCOPE OF WORK:</b> Prep work for potential Class I removal operations							
<b>TYPE OF ASBESTOS MATERIAL TO BE ABATED</b>		<b>Category 1 Friable</b>		<b>QTY. OF ASBESTOS MATERIAL TO BE ABATED</b>			
<b>OSHA ACTIVITY CLASSIFICATION</b>	<b>CLASS I</b>	<b>X</b>	<b>CLASS II</b>		<b>CLASS III</b>		<b>CLASS IV</b>
<b>INSPECTION CATEGORY</b>	<b>ACTIVITY TO BE CHECKED</b>				<b>WITHIN LIMITS</b>	<b>DEVIATION</b>	
<b>WORK SITE ISOLATION</b>	BARRIER TAPE TO ISOLATE STAGING AREA AND DECON				N/A		
	FULL CONTAINMENT				MINI		
	NEGATIVE PRESSURE -0.02 MINIMUM				X		
	FOUR AIR CHANGES PER HOUR				X		
	CRITICAL BARRIERS INTACT (DUCTS, WINDOWS, DOORS, ALL PENETRATIONS)				X		
	FLOOR COVERED				X		
	WALLS COVERED				X		
	AREA VENTILATION OFF & VENTS COVERED				X		
	GLOVEBAGS SMOKE TESTED AND FOUND SATISFACTORY				N/A		
<b>SIGNAGE</b>	CAUTION SIGNS AT STAGING AREA				X		
	OSHA SIGN (ASBESTOS) AT ENTRANCES TO WORK AREA				X		
	WASTE CONTAINERS LABELED PER NESHAP & GENERATOR				X		
	HVAC SYSTEM TAGGED OUT				X		
	NO SMOKING, EATING OR DRINKING IN THE WORK AREA				X		
MARK W/ X, MARK NA IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG							

Signature of Inspector/Project Monitor:  Date: 10 March 01  
Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)

**Industrial Hygiene Technologies, Inc.**

Environmental &amp; Industrial Hygiene Consultants

<b>CLIENT: GSA, NCR, SDS, WPYG</b>	<b>ORDER NUMBER: P-11-01-DC-0101</b>	<b>CONTRACT NUMBER: GS11P00MQD0098</b>	<b>ACT NUMBER: PO2642534</b>
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 10 March 01	

INSPECTION CATEGORY	ACTIVITY TO BE CHECKED	WITHIN LIMITS	DEVIATION
<b>INSPECTION</b>	HIGH-SPEED ABRASIVE DISC SAWS, COMPRESSED AIR, DRY SWEEPING, SHOVELING, EMPLOYEE ROTATION - NOT TO BE USED	X	
	LABELED WASTE CONTAINERS ON SITE	X	
	HEPA VACUUM FOUND WORKING AND ACCEPTABLE	X	
	ACCESS TO WATER FOR WET METHODS	X	
	AIRLESS SPRAYER WORKING AND IN WORK AREA	X	
<b>WORKER PROTECTION</b>	DISPOSABLE COVERALLS & BOOT COVERS	X	
	PROPER NIOSH RESPIRATORS TYPE RESPIRATOR: <u>½ face APR</u> FILTER: <u>P-100</u>	X	
	HEAD PROTECTION		NO
	EYE PROTECTION		NO
<b>SHOWERS</b>	FUNCTIONING		N/A
	HOT AND COLD RUNNING WATER		N/A
	WATER COLLECTION / FILTERING DEVICE FUNCTIONAL	X	
<b>WORK HABITS</b>	HOUSE KEEPING - MATERIALS AND EQUIPMENT STORED. LOCKERS AND PERSONAL ITEM CONTAINERS	X	
<b>SAFETY MEETING</b>	COMPETENT PERSON HAS CONDUCTED A SAFETY MEETING	X	
<b>BASELINE MONITORING</b>	BASELINE MONITORING CONDUCTED PRIOR TO START OF PREPARATIONS	X	
<b>PROJECT DESIGN</b>	PROJECT DESIGN ON SITE, AND ALL PREPARATIONS COMPLETED IN ACCORDANCE WITH DESIGN	X	
<b>DOCUMENTS</b>	NOTIFICATION, PERMIT, ABATEMENT PLAN, CONTRACTOR LICENSE, SUPERVISOR LICENSE, WORKER LICENSE, TRAINING, & MEDICAL, FIT TEST DOCUMENTATION ON SITE AND IN ORDER	X	
MARK W/ X, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG			

See **Asbestos Abatement Monitoring Checklist and Log of Events-** for details concerning project.

Page 2 of 2

Signature of Inspector/Project Monitor:  Date: 10 March01  
Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)

## ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 10 March 01	

<b>REMOVAL CONTRACTOR:</b> Hillian				<b>MONITORING CONTRACTOR:</b> INDUSTRIAL HYGIENE TECHNOLOGIES, INC.			
<b>CONTRACTOR SUPERVISOR:</b> Silvio Argueta							
<b>TIME ON SITE:</b> 0615		<b>TIME OFF SITE:</b>		<b>TIME ON SITE:</b> 0615		<b>TIME OFF SITE:</b>	
<b>ABATEMENT SCOPE OF WORK:</b> Demolition, Decontamination w/ possible TSI removal							
<b>GENERAL SHIFT WORK PLAN:</b> (6) Mini-Containments w/ Non-ACM demolition & ACM decontamination							
<b>TYPE AND QUANTITY OF ASBESTOS REMOVED THIS SHIFT:</b> N/A							
<b>OSHA ACTIVITY CLASSIFICATION</b>	<b>CLASS I</b>	<b>X</b>	<b>CLASS II</b>		<b>CLASS III</b>		<b>CLASS IV</b>
<b>INSPECTION CATEGORY</b>	<b>ACTIVITY TO BE CHECKED</b>				<b>WITHIN LIMITS</b>	<b>PROBLEMS ENCOUNTERED</b>	
<b>WORK SITE ISOLATION</b>	BARRIER TAPE				N/A		
	FULL CONTAINMENT				Mini(s)		
	NEGATIVE PRESSURE -0.02 MINIMUM				X		
	FOUR AIR CHANGES PER HOUR				X		
	FLOOR COVERED				X		
	WALLS COVERED				X		
	CRITICAL BARRIERS INTACT				X		
	AREA VENTILATION OFF & VENTS COVERED				X		
	NEGATIVE PRESSURE GLOVEBAG USED				N/A		
<b>SIGNAGE</b>	CAUTION SIGNS AT STAGING AREA				X		
	OSHA SIGN (ASBESTOS) AT ENTRANCES TO WORK AREA				X		
	WASTE CONTAINERS LABELED PER NESHAP & GENERATOR				X		
	HVAC TAG OUT				X		
<b>MARK W/ X - EXPLAIN IN NOTES, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG</b>							

Signature of Inspector/Project Monitor:  Date: 10 March 01

Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 10 March 01	

INSPECTION CATEGORY	ACTIVITY TO BE CHECKED	WITHIN LIMITS	PROBLEMS ENCOUNTERED
<b>WORK PRACTICES</b>	HIGH-SPEED TOOLS, COMPRESSED AIR, DRY SWEEPING, SHOVELING, EMPLOYEE ROTATION NOT IN USE	X	
	REMOVED MATERIAL PROPERLY BAGGED	X	
	WASTE REMOVED PRIOR TO SHIFT END	X	
	HEPA VACUUM IN USE	X	
	MATERIAL KEPT WET / USE OF WET METHODS	X	
	AIRLESS SPRAYER IN USE	X (Hudson Sprayer)	
	OSHA COMPLIANT GLOVEBAG PROCEDURE	N/A	
<b>WORKER PROTECTION</b>	DISPOSABLE CLOTHING USED ONCE	X	
	PROPER NIOSH RESPIRATORS TYPE RESPIRATOR: _____ FILTER: ½ Face APR P-100	X	
	PROPER DECON SEQUENCE FOLLOWED	X	
<b>SHOWERS</b>	FUNCTIONING	N/A	
	HOT AND COLD RUNNING WATER	N/A	
	USED EACH DEPARTURE	X	
	WATER COLLECTED & FILTERED PROPERLY	X	
<b>WORK HABITS IN WORK AREA</b>	NO SMOKING, EATING OR DRINKING IN THE WORK AREA	X	
<b>DOCUMENTS</b>	NOTIFICATION, PERMIT, ABATEMENT PLAN, CONTRACTOR LICENSE, SUPERVISOR LICENSE, WORKER LICENSE, TRAINING, & MEDICAL, FIT TEST DOCUMENTATION ON SITE AND IN ORDER	X	
<b>MARK W/ X - EXPLAIN IN NOTES, MARK N/A IF NOT REQUIRED/UTILIZED, EXPLAIN DEVIATIONS IN LOG</b>			

Page 2 of 10

Signature of Inspector/Project Monitor:  Date: 10 March 01

Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 10 March 01	

**DAILY LOG OF EVENTS**

**Remediation Activities**

0615: Hillian on site New Executive Office Building 725 17<sup>TH</sup> Street NW Washington DC . Silvio Argueta Hillian superintendent informs IHT that Hillian shall be commencing demolition and decontamination operations with the potential for ACM Class I removal operations using Mini-Containments, hand tools, and wet methods. These removal activities are to occur in 5<sup>TH</sup> Floor Room 5208 Risers 64A - 70A and 5217 Risers A41 and 40, Mini-Containment work areas A, B, C, D, E, & F. Hillian has been contracted to cut out (2) 2'x2' sections of non-ACM plaster wall per riser at the general location of the fittings associated with the Fan Coil Unit with a Mini-Containment. Spray-On Surfacing material is located above the position of the cut and there is the possibility of TSI hard plaster fittings on the elbows. Hillian has been contracted to conduct decontamination operations for Spray-On Surfacing Material Debris and possible TSI fitting removal once the access panels have been cut. All debris to be disposed of as regulated ACM waste in EPA approved landfill.

0645: Hillian workers mobilize and continue prepwork on 5<sup>TH</sup> Floor. Work areas consist of Room 5208: Work Area A - Risers 69A and 70A, Work area B - Risers 67A and 68A, Work Area C - Riser 66A, Work Area D - Risers 64A and 65A, Work Area E - Riser A41, Work Area F - Riser A40.

0720 - 1210: Hillian workers commence demolition operations in Areas B(0720), C(0820), D(0855), A(0940), E(1055), and F(1110). Once area passed Post-Abatement inspection, Hillian encapsulated areas.

1215-1330: Hillian Break

1345-1530: Hillian workers commence Mini-containment tear down and wall panel placement as Work Areas were cleared by PCM analysis.

1830: Hillian departed the site.

**Sampling**

0615: IHT on site to perform area air monitoring and abatement quality control.

0710: IHT began sampling.

1700: IHT completed sampling. IHT off site.

**Inspections**

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Signature of Inspector/Project Monitor:  Date: 10 March 01

Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 10 March 01	

0700-1105: IHT conducts pre-commencement inspection of work areas B(0700), C(0815), D(0850), A(0935), E(1050), and F(1105). IHT notes that Hillian has set up a Mini-Containment, with single layer Critical Barrier, Drop Layer of Poly, AFD in operation, signs & DCON bucket in place. Deemed satisfactory Hillian authorized to commence demolition & decontamination operations in Mini-Containments.

0915-1205: IHT conducts pre-sealant inspection of work areas B(0915), C(0945), D(1045), A(1130), E(1155), and F(1205). IHT notes areas are free of visible ACM dust and debris. Hillian authorized to encapsulate work areas.

**Comments**

ACM Class I demolition and decontamination operations in proceeded without incident. PCM air sample analysis performed: IHT reported no elevated sample results outside of work areas. All area samples outside reported airborne fiber concentration levels below 0.01 fibers/cc.

PCM post abatement air sample analysis performed: IHT reported no elevated sample results. All work area post abatement samples reported airborne fiber concentration levels below 0.01 fibers/cc. Deemed Satisfactory. IHT authorizes Hillian to tear down work areas.


Signature of Inspector/Project Monitor:  Date: 10 March 01

Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)

**Industrial Hygiene Technologies, Inc.**

Environmental &amp; Industrial Hygiene Consultants

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 10 March 01	


PCM SAMPLE LOG										
Microscopist:  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-031001-01CT	REM	New Executive Office Building: Hallway adjacent to room 5218	5.0	5.0	7:20 AM	11:20 AM	240	1200	3.5	<0.003
2534-031001-02CT	REM	New Executive Office Building: Hallway adjacent to room 5230	5.0	5.0	7:20 AM	11:20 AM	240	1200	3.0	<0.003
2534-031001-03CT	STA	New Executive Office Building: Room 5208: Risers 67A and 68A Inside Mini-containment for area B	3.0	3.0	7:10 AM	9:20 AM	130	390	100/23	0.546
2534-031001-04CT	DCON	New Executive Office Building: Room 5208: Risers 67A and 68A Inside decon for Mini-containment area B	10.0	10.0	7:10 AM	9:20 AM	130	1300	100/50	0.075
2534-01001-05CT	CB	New Executive Office Building: Room 5208: Risers 67A and 68A Critical barrier adjacent to decon of area B	10.0	10.0	7:10 AM	9:20 AM	130	1300	23.0	0.009

Page 5 of 10

Signature of Inspector/Project Monitor:  Date: 10 March 01Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 10 March 01	

<b>PCM SAMPLE LOG</b>										
<b>Microscopist:</b>  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-031001-06CT	STA	New Executive Office Building: Room 5208: Risers 66A Inside Mini-containment for area C	3.0	3.0	8:20 AM	9:55 AM	95	285	Particle Overload	Sample Void
2534-031001-07CT	DCON	New Executive Office Building: Room 5208: Risers 66A Decon entrance for area C	10.0	10.0	8:20 AM	9:55 AM	95	950	7.5	0.004
2534-031001-08CT	CB	New Executive Office Building: Room 5208: Risers 66A Critical barrier adjacent to decon of area C	10.0	10.0	8:20 AM	9:55 AM	95	950	3.5	<0.004
2534-031001-09CT	STA	New Executive Office Building: Room 5208: Risers 64A and 65A Inside of Mini-containment for area D	3.0	3.0	8:55 AM	10:55 AM	120	360	Particle Overload	Sample Void

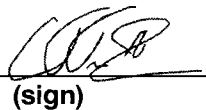
Page 6 of 10

Signature of Inspector/Project Monitor:  Date: 10 March 01Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)



**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 10 March 01	

<div style="display: flex; justify-content: space-between;"> <div>Microscopist:  (sign)</div> <div><b>PCM SAMPLE LOG</b></div> </div>										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-031001-10CT	DCON	New Executive Office Building: Room 5208: Risers 64A and 65A Decon entrance for area D	10.0	10.0	8:55 AM	10:55 AM	120	1200	14.5	0.006
2534-031001-11CT	CB	New Executive Office Building: Room 5208: Risers 64A and 65A Work Area D critical barrier adj to Decon	10.0	10.0	8:55 AM	10:55 AM	120	1200	20.0	0.008
2534-031001-12CT	STA	New Executive Office Building: Room 5208: Risers 69A and 70A Inside Mini-containment for area A	3.0	3.0	9:40 AM	11:35 AM	115	345	100/62	0.229
2534-031001-13CT	DCON	New Executive Office Building: Room 5208: Risers 69A and 70A Decon entrance for area A	10.0	10.0	9:40 AM	11:35 AM	115	1150	12.0	0.005

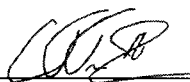
Page 7 of 10

Signature of Inspector/Project Monitor:  Date: 10 March 01

Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 10 March 01	

PCM SAMPLE LOG										
Microscopist:  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-031001-14CT	CB	New Executive Office Building: Room 5208: Risers 69A and 70A Critical barrier adjacent to decon for area A	10.0	10.0	9:40 AM	11:35 AM	115	1150	10.5	0.004
2534-031001-15CT	STA	New Executive Office Building: Room 5217:Riser A41 Inside Mini-containment for area E	3.0	3.0	10:55 AM	12:00 PM	65	195	100/26	0.966
2534-031001-16CT	DCON	New Executive Office Building: Room 5217:Riser A41 Decon entrance for area E	10.0	10.0	10:55 AM	12:00 PM	65	650	4.5	<0.005
2534-031001-17CT	CB	New Executive Office Building: Room 5217:Riser A41 Critical barrier adjacent to decon for area E	10.0	10.0	10:55 AM	12:00 PM	65	650	4.0	<0.005


Page 8 of 10

Signature of Inspector/Project Monitor:  Date: 10 March 01

Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 10 March 01	

PCM SAMPLE LOG										
Microscopist:  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-031001-18CT	STA	New Executive Office Building: Room 5217: Riser A40 Inside Mini-containment for area F	3.0	3.0	11:10 AM	12:10 PM	60	180	pump fail	Sample Void
2534-031001-19CT	DCON	New Executive Office Building: Room 5217: Riser A40 Decon entrance for area F	10.0	10.0	11:10 AM	12:10 PM	60	600	6.5	<0.006
2534-031001-20CT	CB	New Executive Office Building: Room 5217: Riser A40 Critical barrier adjacent to decon for area F	10.0	10.0	11:10 AM	12:10 PM	60	600	8.0	0.007
2534-031001-21CT	REM	New Executive Office Building: Hallway next to room 5218	5.0	5.0	11:20 AM	2:00 PM	160	800	3.0	<0.004
2534-031001-22CT	REM	New Executive Office Building: Hallway next to room 5230	5.0	5.0	11:20 AM	2:00 PM	160	800	2.0	<0.004

Page 9 of 10

Signature of Inspector/Project Monitor:  Date: 10 March 01

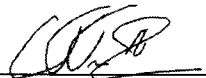
Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)

**Industrial Hygiene Technologies, Inc.**

Environmental &amp; Industrial Hygiene Consultants

**ASBESTOS ABATEMENT MONITORING DAILY CHECKLIST & LOG OF EVENTS**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 10 March 01	

<b>PCM SAMPLE LOG</b>										
Microscopist:  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-031001-35CT	REM	New Executive Office Building: Hallway next to room 6210 (6 <sup>th</sup> floor)	5.0	5.0	7:23 AM	1:48 PM	385	1925	3.5	<0.002
2534-031001-36CT	REM	New Executive Office Building: Hallway next to room 4210 (4 <sup>th</sup> floor)	5.0	5.0	7:25 AM	1:50 PM	385	1925	4.5	<0.002

Page 10 of 10

Signature of Inspector/Project Monitor:  Date: 10 March 01Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)

**ABATEMENT FINAL INSPECTION CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 10 March 01	

<b>REMOVAL CONTRACTOR:</b> Hillian				<b>MONITORING CONTRACTOR:</b> INDUSTRIAL HYGIENE TECHNOLOGIES, INC.			
<b>CONTRACTOR SUPERVISOR:</b> Silvio Argueta							
				<b>TIME START:</b> 0615		<b>TIME COMPLETE:</b> 1700	
<b>ABATEMENT SCOPE OF WORK:</b> Demolition, Decontamination w/ possible TSI removal							
<b>TYPE OF ASBESTOS MATERIAL ABATED</b>		N/A		<b>QTY. OF ASBESTOS MATERIAL ABATED</b>		N/A	
<b>OSHA ACTIVITY CLASSIFICATION</b>	<b>CLASS I</b>		<b>CLASS II</b>		<b>CLASS III</b>		<b>CLASS IV</b>
<b>DESCRIBE SPECIFIC WORK AREA INSPECTED:</b> NEOB: 5 <sup>TH</sup> Floor Room 5208 & 5217 Risers 69A to 65A & Risers 40A to 41A Mini-Containment Work Area's A, B, C, D, E, & F.							
<b>TOTAL SQUARE FOOTAGE OF WORK AREA:</b> 6 Mini-Containments 40ft <sup>2</sup> per work area							
<b>FINAL CLEARANCE (AHERA, PCM, NIOSH 7402, AGGRESSIVE):</b> PCM							
<b>INSPECTION CATEGORY</b>	<b>ACTIVITY TO BE CHECKED</b>	<b>WITHIN LIMITS</b>	<b>PROBLEMS ENCOUNTERED</b>				
Residual Dust / Debris	Floor	YES					
	Horizontal Surfaces	YES					
	Pipes	YES					
	Ventilation Equip.	YES					
	Ductwork	N/A					
	Registers	N/A					
	Lights	N/A					
	Other	N/A					
(The above questions are to be answered "YES" or "Problem Encountered Noted".)							

See **Asbestos Abatement Monitoring Checklist and Log of Events- Daily Log of Events** for details concerning project.


Page 1 of 4

Signature of Inspector/Project Monitor:  Date: 10 March 01Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)

**Industrial Hygiene Technologies, Inc.**

Environmental &amp; Industrial Hygiene Consultants

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 10 March 01	


<b>PCM SAMPLE LOG</b>										
<b>Microscopist:</b>  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-031001-23CT	POST	New Executive Office Building: Room 5208: Risers 67A and 68A Inside area B	10.0	10.0	11:23 AM	1:23 PM	120	1200	6.5	<0.003
2534-031001-24CT	POST	New Executive Office Building: Room 5208: Risers 67A and 68A Inside area B	10.0	10.0	11:23 AM	1:23 PM	120	1200	10.0	0.004
2534-031001-25CT	POST	New Executive Office Building: Room 5208: Risers 66A Inside area C	10.0	10.0	11:27 AM	1:27 PM	120	1200	3.0	<0.003
2534-031001-26CT	POST	New Executive Office Building: Room 5208: Risers 66A Inside area C	10.0	10.0	11:27 AM	1:27 PM	120	1200	4.5	<0.003

Page 2 of 4

Signature of Inspector/Project Monitor:  Date: 10 March 01Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)

**ABATEMENT FINAL INSPECTION CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 10 March 01	

PCM SAMPLE LOG										
Microscopist:  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-031001-27CT	POST	New Executive Office Building: Room 5208: Risers 64A and 65A Inside area D	10.0	10.0	12:18 PM	2:18 PM	120	1200	4.5	<0.003
2534-031001-28CT	POST	New Executive Office Building: Room 5208: Risers 64A and 65A Inside area D	10.0	10.0	12:18 PM	2:18 PM	120	1200	6.0	<0.003
2534-031001-29CT	POST	New Executive Office Building: Room 5208: Risers 69A and 70A Inside area A	10.0	10.0	12:23 PM	2:23 PM	120	1200	4.0	<0.003
2534-031001-30CT	POST	New Executive Office Building: Room 5208: Risers 69A and 70A Inside area A	10.0	10.0	12:23 PM	2:23 PM	120	1200	5.0	<0.003


Page 3 of 4

Signature of Inspector/Project Monitor:  Date: 10 March 01

Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)

**ABATEMENT FINAL INSPECTION CHECKLIST & LOG**

<b>CLIENT:</b> GSA, NCR, SDS, WPYG	<b>ORDER NUMBER:</b> P-11-01-DC-0101	<b>CONTRACT NUMBER:</b> GS11P00MQD0098	<b>ACT NUMBER:</b> PO2642534
<b>BUILDING:</b> New Executive Office Bldg:		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 10 March 01	

PCM SAMPLE LOG										
Microscopist:  (sign)										
Sample Number	Sample Type	Location	Flow rate		Time		Minutes elapsed	Liters	Fibers / 100 fields	Fiber / cc
			on	off	on	off				
2534-031001-31CT	POST	New Executive Office Building: Room 5217: Riser A41 Inside area E	10.0	10.0	1:00 PM	3:00 PM	120	1200	3.0	<0.003
2534-031001-32CT	POST	New Executive Office Building: Room 5217: Riser A41 Inside area E	10.0	10.0	1:00 PM	3:00 PM	120	1200	2.5	<0.003
2534-031001-33CT	POST	New Executive Office Building: Room 5217: Riser A40 Inside area F	10.0	10.0	1:10 PM	3:10 PM	120	1200	4.0	<0.003
2534-031001-34CT	POST	New Executive Office Building: Room 5217: Riser A40 Inside area F	10.0	10.0	1:10 PM	3:10 PM	120	1200	4.0	<0.003

Page 4 of 4

Signature of Inspector/Project Monitor:  Date: 10 March 01

Project Monitor: Charles Turner Training Cert./ License No: 051785  
(Print/Type) (Print/Type)



**Industrial Hygiene Technologies, Inc.**  
Environmental & Industrial Hygiene Consultants

**GSA ABATEMENT PERSONNEL REPORT**

<b>BUILDING:</b> New Executive Office Building		<b>LOCATION:</b> 725 17 <sup>TH</sup> Street NW. Washington, DC	
<b>PROJECT:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 9 March 01	
<b>REMOVAL CONTRACTOR:</b> Hillian Brothers		<b>MONITORING CONTRACTOR:</b> INDUSTRIAL HYGIENE TECHNOLOGIES, INC	
<b>SHIFT START TIME:</b> 1845		<b>SHIFT COMPLETION TIME:</b> 2215	
<b>SCOPE OF WORK</b>			
<b>ASBESTOS WORK:</b> 5 <sup>TH</sup> Floor Fan Coil Unit Replacement Project Demolition & Decontamination (Prep Work)			
<b>ASBESTOS CLASS I</b>	<b>ASBESTOS CLASS II</b>	<b>ASBESTOS CLASS III</b>	<b>ASBESTOS CLASS IV</b>
NEA OBTAINED	NEA OBTAINED	NEA OBTAINED	NEA OBTAINED
<b>LEAD WORK:</b> N/A			
<b>LEAD ABATEMENT</b>	<b>LEAD DEMOLITION</b>	<b>INTACT ITEMS</b>	<b>STRIPPING</b>
NEG. INIT. DETERM.	NEG. INIT. DETERM.	NEG. INIT. DETERM.	NEG. INIT. DETERM.

<b>PERSONAL INFORMATION</b>			
<b>NAME: (LAST, FIRST, MI - PRINT)</b>	<b>SOCIAL SECURITY NO.</b>	<b>MEDICALS / FIT TESTS ON SITE</b>	<b>STATE LICENSE NO. / TYPE (TRAINING CERT. NO)</b>
SILVIO ARGUETA	225-35-2641	✓	2993 3290
JUAN GIRON	577-23-5460	✓	3000 4304
JOAQUIN GIRON	577-21-4573	✓	2995 1658
SILVIA FLORES	578-21-0278	✓	2493 3314
FRANCISCO TOBAR	621-52-5987	✓	2993 1097
LYALY TOBAR	230-81-3492	✓	2996 1241
ODIRSA ARGUETA	230-59-3192	✓	2993 3297
RUPINO FLORES	212 19-2009	✓	2993 3298
CLEMENTE MEJIA	148-96-3494	✓	
EISRA RES.	606-58-9796	✓	2493 3298

Page 1 of 1

Signature of Inspector/Project Monitor: \_\_\_\_\_

Date: 03/02/01

Project Monitor CHARLES TURNER  
(Print Name)

Training Cert./ License No: 01-0104

(Print Name)

**Industrial Hygiene Technologies, Inc.**  
Environmental & Industrial Hygiene Consultants

**GSA ABATEMENT PERSONNEL REPORT**

<b>BUILDING:</b> New Executive Office Building		<b>LOCATION:</b> 725 17 <sup>th</sup> Street NW, Washington, DC	
<b>PROJECT:</b> 5 <sup>th</sup> Floor Fan Coil Unit Replacement Project		<b>DATE:</b> 10 March 01	
<b>REMOVAL CONTRACTOR:</b> Hillian Brothers		<b>MONITORING CONTRACTOR:</b> INDUSTRIAL HYGIENE TECHNOLOGIES, INC	
<b>SHIFT START TIME:</b> 0630		<b>SHIFT COMPLETION TIME:</b>	
<b>SCOPE OF WORK</b>			
<b>ASBESTOS WORK:</b> 5 <sup>th</sup> Floor Fan Coil Unit Replacement Project Prep Work & Abatement			
<b>ASBESTOS CLASS I</b>	<input checked="" type="checkbox"/>	<b>ASBESTOS CLASS II</b>	<input type="checkbox"/>
<b>ASBESTOS CLASS III</b>	<input type="checkbox"/>	<b>ASBESTOS CLASS IV</b>	<input type="checkbox"/>
<b>NEA OBTAINED</b>	<input type="checkbox"/>	<b>NEA OBTAINED</b>	<input type="checkbox"/>
<b>LEAD WORK:</b>			
<b>LEAD ABATEMENT</b>	<input type="checkbox"/>	<b>LEAD DEMOLITION</b>	<input type="checkbox"/>
<b>INTACT ITEMS</b>	<input type="checkbox"/>	<b>STRIPPING</b>	<input type="checkbox"/>
<b>NEG. INIT. DETERM.</b>	<input type="checkbox"/>	<b>NEG. INIT. DETERM.</b>	<input type="checkbox"/>

PERSONAL INFORMATION			
NAME: (LAST, FIRST, MI - PRINT)	SOCIAL SECURITY NO.	MEDICALS / FIT TESTS ON SITE	STATE LICENSE NO. / TYPE (TRAINING CERT. NO)
SILVIO ARGUETA	225-35-2649	✓	2993 3290
ODIRSA ARGUETA	230-59-3492	✓	2993 3297
FRANCISCO TOBAR	621-52-5487	✓	2993 1097
IYALY TOBAR	230-59-3192	✓	2996 1241
SILVIA FLORES	578-21-0278	✓	2993 3314
NAPOLION VARGUEZ	213-21-0192	✓	2992 6816
EISIRA REYES	606-58-9796	✓	2993 3298
CLEMENTE MEJIA	148-46-3494	✓	

Page 1 of 2

Signature of Inspector/Project Monitor: CTT Date: 10 March 01

Project Monitor: Charles Turner Training Cert./ License No: 051785

(Print/Type)

(Print/Type)

NOTE TO FILE

BUILDING NAME: NEOB

DATE: 2/16/94

BUILDING NUMBER: DC0105ZZ

BUILDING ADDRESS: 725 17TH STREET, NW  
WASHINGTON, DC

COMMENTS:

On the above date Bob Reeve of the White House Projects Office, Ray Granados of the White House Fire Alarm Shop, and myself met at the NEOB to discuss the fire alarm sub-systems in the 4th floor main computer room for the building. This computer room was originally smaller than what it is now. The separate fire alarm system provided for part of it is an Autocall system tied to the existing building fire alarm system via the HOW loop. This system consists of smoke detectors, a waterflow switch and tamper switch. It covers about 1/4 of the overall computer room. Per Ray, the smoke detectors tied to this system are from Hawaii and can no longer be obtained.

The other 3/4 of the computer room is provided with another fire alarm system, a Fire-Lite Sensiscan 1000 panel, with smoke detectors tied to it and an annunciator. This panel is not presently tied to the building system. Therefore, it must be interfaced to transmit both an alarm and trouble signals to the new building fire alarm system.

Once the existing building fire alarm system is removed, the smaller computer fire alarm system will not be able to function. Its communication loop will be gone. Therefore, the meeting was to decide the best plan of action to provide a solution to this problem.

Ray made a great suggestion to incorporate the smaller part of the computer room's detection into the larger part's system. He is very familiar with both systems and stated that even all or some of the existing conduit may be able to be reused. Also, this changeover could take place within one day.

This is workable, because the Fire-Lite panel has spare zones and more can be added if necessary. We discussed and decided on the following: new smoke detectors matching the existing ones tied to the Fire-Lite panel will replace the existing ones tied to the Autocall system (smokes are presently placed above the ceiling, at the ceiling and in the underfloor); the waterflow and tamper switches will be

tied to the Fire-Lite panel; alarm and trouble signals will be sent from the computer room fire alarm system to the building fire alarm system via addressable interface devices. If the existing conduit can be reused, then it will be; however, if new conduit must be run then it will have to be provided. Asbestos is an issue. Any ceiling work will have to be coordinated with the asbestos removal. The existing transmitter/Autocall cabinet can be used as a junction box if necessary.

I stated that the tamper switch may also be tied to the building fire alarm system. It does not have to be tied to the computer room fire alarm system, although Ray would prefer it to be. However, it would actually be better to tie it to the building fire alarm system, so that we get a supervisory signal verses a trouble signal.

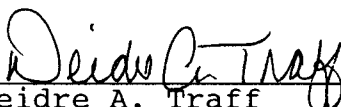
A new waterflow switch and tamper switch are being added to separate and isolate the computer room from the rest of the floor's sprinkler system. This is mandatory, because computer power shutdown is done by a relay upon activation of the waterflow switch.

Ray stated that the White House Fire Alarm Shop can do the work and prefers to do the work. I agreed that this was the best way to approach it and that there should be money Bob can allocate under the fire alarm contract for fire alarm shop support. I stated that this has been done before on many occasions where similar situations have arisen.

The only other issue to be resolved is the annunciator. This will also be required to be changed to indicate the additional underfloor smoke detectors. The additional smoke detectors will also need to be point wired to the annunciator so that the appropriate LED will light upon activation of the detector. This will need to be coordinated with Ray.

It is very important to ensure that the computer room is provided with fire protection at all times. Any down time should be held to a minimum and a fire watch provided, if necessary, during the down time to ensure early notification and evacuation.

Provided by:

 2/25/94  
Deidre A. Traff  
Fire Protection Engineer

UNITED STATES GENERAL SERVICES ADMINISTRATION

NATIONAL CAPITAL REGION

SAFETY AND ENVIRONMENTAL MANAGEMENT DIVISION

FACSIMILE TRANSMISSION COVER SHEET

Transmitted To:

Bob Reeve

2/28/94

(NAME)

(DATE)

WHPD

(ORGANIZATION)

ADDRESS: (BUILDING, ROOM #, ETC.)

254-8086

254-3667

(OFFICE TELEPHONE)

(FAX TELEPHONE)

Transmitted From:

Deide Traff

GSA/WPX F

(202) 708-5236

(202) 708-6618

(OFFICE TELEPHONE)

(FAX TELEPHONE)

Pages Transmitted:

3

(COUNT INCLUDES COVER SHEET)

Contents/Comments/Notes:

Bob,

Here's a copy of my Note to File on  
our meeting @ NEDB on the 16<sup>th</sup>. Say it's  
accurate. Thanks!

Deide

NOTE: If the number of pages transmitted have not been received,  
please contact sender and request re-transmission of the  
unreceived pages.

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GSA/NCR/WPX

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031	MEMORY TX		93954546	03/03	OK

## ERRORS

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## UNITED STATES GENERAL SERVICES ADMINISTRATION

## NATIONAL CAPITAL REGION

## SAFETY AND ENVIRONMENTAL MANAGEMENT DIVISION

FACSIMILE TRANSMISSION COVER SHEET

Transmitted To:

Ray Granados  
(NAME)2/28/94  
(DATE)WHEF

(ORGANIZATION)

ADDRESS: (BUILDING, ROOM #, ETC.)

395-4984

(OFFICE TELEPHONE)

395-4546

(FAX TELEPHONE)

Transmitted From:

Deide TrayGSA/WPXF

(202) 708-5236

(202) 708-6618

(FAX TELEPHONE)

UNITED STATES GENERAL SERVICES ADMINISTRATION

NATIONAL CAPITAL REGION

SAFETY AND ENVIRONMENTAL MANAGEMENT DIVISION

FACSIMILE TRANSMISSION COVER SHEET

Transmitted To:

Ray Granados 2/28/94  
(NAME) (DATE)

WtHFA

(ORGANIZATION)

ADDRESS: (BUILDING, ROOM #, ETC.)

395-4984 : 395-4546  
(OFFICE TELEPHONE) (FAX TELEPHONE)

Transmitted From:

Deide Traff

GSA/WPXF

(202) 708-5236 : (202) 708-6618  
(OFFICE TELEPHONE) (FAX TELEPHONE)

Pages Transmitted: 3 (COUNT INCLUDES COVER SHEET)

Contents/Comments/Notes:

Ray,

This is a copy of my Note to File on  
our meeting @ NEDB on the 16<sup>th</sup>. See if this  
sounds accurate to you. Thanks!

Deide

NOTE: If the number of pages transmitted have not been received, please contact sender and request re-transmission of the unreceived pages.

(wpf/fax/900529)

MAY 5 1992

MEMORANDUM FOR DOUGLAS E. NELSON  
DISTRICT MANAGER-DESIGN (WPCOD)

ATTN: LARRY AITCHESON

FROM: JOHN H. GOTT *John H. Gott*  
CHIEF, FIRE PROTECTION ENGINEERING BRANCH (WPXF)

SUBJECT: Fire Protection Engineering Review Comments

PROJECT TITLE: Install Sprinkler System and Fire Alarm System  
New Executive Office Building

BUILDING NUMBER: DC0105ZZ

JOB NUMBER: IDC 18222

CONTRACTOR (CONSTR. OR A/E): Halliburton Nus Environmental Corp.

SUBMISSION TYPE & DATE: 60 %, dt'd 04/27/92

FILE NAME:cdNEOB60

\_\_\_ Submission is approved.

XXX Submission is approved as noted.

\_\_\_ Submission is disapproved.

\_\_\_ Resubmission is required.

NO: 1 FIRE AND LIFE SAFETY REVIEW COMMENTS:

1. The specifications should explain the project areas so that the contractor can properly bid this job.

2. Please determine if there are any duct smoke detectors in the building. They must be monitored by the new fire alarm system.

3. Please determine if there are any existing kitchen suppression systems or computer room fire alarm systems. These systems must be connected to the building fire alarm system.

4. Provide a two way fire department communication system in all areas required per BOCA 1990, Section 602.8.

5. Provide elevation drawings.

6. Provide drawings of the elevator machine rooms and penthouse level(s).

7. Provide heat detectors, smoke detectors and waterflow switches for the elevator machine room. Provide a means to disconnect the power to the elevator equipment upon activation of any heat detector or waterflow switch.



8. Please indicate on the drawings if there are any SCIF areas.

#### SPECIFICATIONS

9. Spec 01300, Section 1.5: Add the following: All fire protection submittals require a 30 day review period.

10. Spec 15310, Section 2.3: Include the fire pump size.

11. Spec 15310, Section 4.6: Delete.

12. Spec 15310, Section 6.3: Provide a sentence permitting the use of butterfly valves for the riser control valves.

13. Spec 15310, Section 8.2: Change 5.8 to 5/8.

14. Spec 15310, Section 10.6: ~~Add~~ the following: supplied from the highest and most remote part of the system when possible ...

15. Spec 16723: Edit the entire specification for this project.

#### DRAWINGS

16. Provide a symbols list for the drawings.

17. Provide the structural ceiling height on the drawings. This can be done as a general note but should not be located only in the asbestos notes.

18. Provide the proposed project areas on all drawings to avoid confusion.

19. Provide wall construction types for all floors.

20. Dwg A-PA-B2: No project areas are shown on this drawing, however fire alarm and sprinkler work must be done on this floor. Please clarify.

21. Dwg A-PA-B1 - A-PA-10: The corridors and elevator lobbies are not included in a project area however fire alarm and sprinkler work must be done in these areas. Please clarify.

22. Dwg A-PA-B1 - A-PA-10: Provide heavier lines for the project areas.

23. Dwg A-PA-04: The computer room is designated as NIC however new sprinkler piping is being routed through this area and fire alarm devices are being provided for this area. Please clarify.

24. Dwg A-RC-B2 - 10: Provide a description of these symbols, • • • . (See comment #14). If these are sprinkler heads, provide a note stating that the actual location of heads may vary from that shown on the drawings due to obstructions above the ceiling.

25. Dwg A-RC-B1: The location of sprinkler heads is shown for the existing systems in some areas and not in others. Please be consistent. We recommend not showing the location of the heads.
26. Dwg A-RC-01: On this drawing a sprinkler head is being shown in the stair vestibule and on other floors the vestibule is not being sprinkled. Please clarify.
27. Dwg A-RC-04: See comment 23 for the existing computer room sprinkler system.
28. Dwg A-RC-09 - 10: Sidewall sprinkler heads are being used to cover window areas when they are not required. Please resolve.  
← elevation diff
29. Dwg M-FP-B2 - 10: Identify any areas which are extra hazard areas on the drawings.
30. Dwg M-FP-B2 - 10: Add a note stating that the actual location of the sprinkler piping may vary from that shown on the drawings due to obstructions above the ceiling.
31. Dwg M-FP-B2: Show where the existing sprinkler feed is located and where the new system connects to it.
32. Dwg M-FP-B1: Show the feed to the area adjacent to stair 2.
33. Dwg M-FP-04: Show the connection to the existing computer room sprinkler system from the new system.
34. Dwg M-FP-\_\_: Provide a sprinkler system riser diagram.
35. Dwg M-FP-11: This drawing, Sprinkler Zone Control Details, is not provided. Please resolve.
36. Dwg E-LP-B2 - E-FN-10: Provide the floor number in the title block type area as was done in the other drawings.
37. Dwg E-FD-B2 - E-FD-10: There is no note or legend stating whether these devices are existing to be removed or existing to remain. Please clarify.
38. Dwg E-FD-B2 - E-FD-10: These drawing are not necessary since all existing devices are shown on the new work drawings also. Please resolve.
39. Dwg E-FN-B2: Provide speakers, waterflow and tamper switches for this floor.
40. Dwg E-FN-B2 - 10: Provide addressible interface devices for the waterflow and tamper switches.
41. Dwg E-FN-B1 - 10: Provide manual pull stations within 5 feet of all exits.

42. Dwg E-FN-B1 - 2: Provide speakers/strobes on these floors.
43. Dwg E-FN-03 - 10: Coordinate the location of the speakers as they are shown where walls are located in some areas.
44. Dwg E-FN-11/12: Please define all symbols. (See comment #16)
45. Dwg E-FN-11/12: Show where the remote panels are to be located on the floor plans.
46. Dwg E-FN-11/12: Show the connections to RCC, power, batteries, etc.
47. Dwg E-FN-11/12: Provide the minimum number of wires in the conduct runs on the riser diagram.
48. Dwg E-FN-11/12: Please explain the system loops, etc. They are incomplete on this riser diagram.
49. Dwg E-FN-11/12: Provide the devices on the riser which were not included in this submission.
50. Dwg E-FN-\_\_: Provide a drawing with fire alarm details, annunciator, etc.

A written response, individually addressing the comments listed above, must accompany the next submittal.

Reviewed by: (WPXF) \_\_\_\_\_ Date \_\_\_\_\_  
Laurie Doyle  
Fire Protection Engineering Branch  
(202) 708-5236  
WPXF FORM # 02, (3/89)

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>		1. CONTRACT ID CODE GS-11P87MKC7498"N"	PAGE OF PAGES 1   2
2. AMENDMENT/MODIFICATION NO. One (1)	3. EFFECTIVE DATE 7/15/87	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable) RDC78042
6. ISSUED BY General Services Administration, NCR Construction Contracts Branch (WQPC) GSA Regional Office Building, Room 2640 7th & D Streets, SW. Washington, DC 20407		7. ADMINISTERED BY (If other than Item 6) CODE	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)  ALL PROSPECTIVE OFFERORS		9A. AMENDMENT OF SOLICITATION NO. GS-11P87MKC7498 "NEG"	
		9B. DATED (SEE ITEM 11)	
		10A. MODIFICATION OF CONTRACT/ORDER NO.	
		10B. DATED (SEE ITEM 13)	
CODE	FACILITY CODE		

**11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS**

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☒ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

(v)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. 14 IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

**14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)**  
**SPECIFICATIONS - VOLUME I OF II**

S-1: The following sections are added and made a part of the contract specifications:

Section 15310, Fire Protection Sprinkler System  
Section 16010, Electric, Basic Requirements  
Section 16050, Basic Wiring and Methods  
Section 16723, Fire Alarm System

DRAWINGS: The attached drawing Nos.FP-1 and E-1 dated 7-14-87, showing new fire pump with associated piping and controls, sprinkler deluge valve and requirements for

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY <u>Jason Brown</u> (Signature of Contracting Officer)	16C. DATE SIGNED 7-15-87

Page 2

Amendment No. 1 to Contract GS-11P87MKC7498 "NEG" continued

provision of sprinkler system for cooling tower, are added and made a part of the contract documents.

END OF AMENDMENT NO. 1

Attachments: Sections 15310, 16010, 16050 and 16723  
Drawing Nos. FP-1 and E-1

## SECTION 15310

### FIRE PROTECTION SPRINKLER SYSTEM

1. **APPLICABLE PUBLICATIONS:** Unless otherwise indicated, the system, its specified components, their installation and operation shall conform to the applicable requirements of the following publications:

- 1.1 **National Fire Protection Association (NFPA):**
  - No. 13 Standard for the Installation of Sprinkler Systems
  - No. 214 Standard on Water Cooling Towers.
  - No. 20 Standard for the Installation of Centrifugal Fire Pumps.
  - No. 70 National Electrical Code
- 1.2 **Underwriters Laboratories (UL):**
  - Fire Protection Equipment Directory (January 1987.)
  - Building Material Directory (January 1987.)
- 1.3 **Factory Mutual Engineering Corporation (FM):**
  - Approval Guide 1986
- 1.4 **American National Standards Institute (ANSI):**
  - A 53.1-1979 Safety Color Code for Marking Physical Hazards
  - A 14.3-1974 Safety Requirements for Fixed Ladders
- 1.5 **American Society for Testing and Materials (ASTM):**
  - E 84-77a Surface Burning Characteristics of Building Materials
  - E 119-78 Fire Tests of Building Construction and Materials
- 1.6 **Federal Specification (Fed. Spec.):**
  - TT-P-86G Paint, Red-Lead-Base, Ready Mixed

1.7 General Services Administration (GSA):

PBS P  
5900.2A

Accident and Fire Prevention-  
General

1.8 Acceptable evidence of compliance of devices and equipment, unless otherwise specifically indicated, is a UL listing or FM label, for its intended use, satisfactory to the Contracting Officer, that the devices and equipment meet the applicable standards. All devices and equipment shall be products being manufactured and having the required UL listing or FM label, for its intended use, at the date of bid opening.

2. DESCRIPTION:

2.1 This section of the specification includes the furnishing of all labor and materials for the installation of a hydraulically calculated cooling tower deluge system, complete in all respects and ready for operation for the New Executive Office Building. The system is subject to the requirements of Section, MECHANICAL EQUIPMENT, GENERAL. Design and installation of the sprinkler system shall be such that no parts interfere with doors, windows, heating, plumbing, air conditioning systems or electrical equipment.

2.2 The work shall be installed in accordance with the drawings, specifications and referenced publications. In case of conflict of requirements, the requirements in GSA Handbook PBS P 5900.2A shall govern.

2.3 Sprinkler heads shall be spaced, located, and positioned according to section 5-2.3 for crossflow towers of NFPA No. 214 piping sizes and configurations shall be on the basis of hydraulic calculations. Under the fan decks the rate of application of water shall be 0.33 gpm/square feet including fan opening. Over the fill areas the rate of application of water shall be 0.5 gpm/square feet.

2.4 Contractor shall obtain flow information from the following:

Bernard L. Gascon  
Chief Project Development Section  
Department of Public Works  
5000 Overload Avenue, SW  
Room 406  
Washington, D.C. 20032

Hydraulic calculations shall be based on a 78 psi static water pressure to the building.

3. SPECIALIST: Installation shall be by a specialist who is experienced in the installation of automatic sprinkler systems (minimum five years). Refer to Section SPECIAL CONDITIONS for additional specialist requirements.

4. **HYDRAULIC CALCULATIONS:** Hydraulic calculations shall be prepared in accordance with Chapter 7 of NFPA No. 13 with the following exceptions:

4.1 Minimum operating pressure of any sprinkler shall be 15 psi.

4.2 Pipe friction losses may be calculated by using the nearest foot for all piping over one foot in length. Horizontal lengths less than one foot may be neglected. Vertical lengths less than one foot shall be included for elevation purposes only.

4.3 Flows shall be calculated to the nearest whole gallon.

4.4 Velocity pressures may be neglected.

4.5 Velocities in all piping shall not exceed 16 feet per second.

5. **SUBMITTALS:**

5.1 **Shop Drawings:**

5.1.1 Detailed working drawings in accordance with Sections 1-9 and 7-2 of NFPA No. 13 shall be prepared and submitted to the Contracting Officer for approval prior to fabrication of piping. Hydraulic calculations shall be a part of this submittal. Partial submissions are not acceptable.

5.1.2 Catalog cuts of all essential equipment such as sprinkler heads, hangers and fittings shall be submitted for approval along with the working drawings.

5.1.3 A layout with sufficient detail to indicate the coordination of the location of sprinkler heads and piping with the cooling tower configuration shall be provided.

5.1.4 The submittal shall include a statement from the sprinkler contractor certifying that the design meets the hydraulic design parameters stated in this specification.

5.2 **As-Built Drawings:**

5.2.1 Detailed as-built drawings shall be prepared and submitted to the Contracting Officer. The drawings shall indicate all information as required for working plans by Sections 1-9 and 7-2 of NFPA No. 13. The drawings shall also show the system as installed including all deviations from the approved shop drawings. The drawings shall be on uniform size sheets no smaller than 30 inches by 42 inches.

5.2.2 Five sets of as-built drawings shall be provided.



5.2.3 Final testing will be conducted only after receipt of the as-built drawings.

6. PIPE, VALVES, AND FITTINGS:

6.1 Piping shall be ferrous piping or copper tube listed in NFPA No. 13 Table 3-1.1.1 and in accordance with Section 3-1 of NFPA NO. 13.

6.1.1 All exterior piping shall be copper tube listed in NFPA. No. 13

6.2 All valves shall be suitable for 175 psi working water pressure.

6.3 Riser and sectional control valves shall be iron body, brass mounted approved OS&Y type.

6.4 Each control valve shall be provided with adequate means for mounting an electrical supervisory contact unit which is specified in Section 16723, FIRE ALARM SYSTEM.

6.5 Drainage and test valves shall be all-bronze, globe, angle or gate valves.

6.6 Check valves two inches and smaller shall be all-bronze with screw ends. Check valves 2-1/2 inches and larger shall be iron body, brass mounted with flange ends and non-ferrous metal set rings and bearings.

6.7 Fittings: Fittings shall be in accordance with Section 3-13 of NFPA No. 13 and suitable for 175 psi working pressure. Joining of pipe and fittings shall be in accordance with Section 3-12 of NFPA No. 13.

7. DELUGE VALVES: Deluge valves shall be UL listed Special System Water Control Valves Class I. Adequate means for mounting a deluge valve actuation device to operate each deluge valve shall be provided. In addition, each deluge valve shall actuate manually from a pull handle located at the valve. Deluge valve clappers shall incorporate a latching mechanism that will not be affected by changes in pressure of the water system. All valves shall be suitable for 175 psi working water pressure. If six inch valves are used in eight inch risers, smoothly tapered connections shall be provided. All necessary gauges, trimmings, and other appurtenances shall be provided for a standard approved unit. All equipment shall be UL listed, and installed in accordance with its listing and Section 5-3 of NFPA No. 13.

8. WATERFLOW DETECTORS: Waterflow detectors are included under Section 16723, FIRE ALARM SYSTEM, however adequate means for mounting these units shall be provided. Coordinate waterflow detectors with pipe sizes.

9. RELEASE SYSTEM: Provide a pneumatic release system to open deluge valve. Fixed temperature releases (pilot heads) shall have identical spacing to the spray nozzles in the cooling tower. Release system shall be manufacturers standard system, compatible with deluge valve and system provided.

10. CONTROL VALVE SUPERVISION: The OS&Y valve supervisory contact units, detectors and all conduit and wiring connected thereto, are included in Section 16723, FIRE ALARM SYSTEM of this specification.

11. FIRE PUMP SYSTEM:

11.1 Provide a fire pump system complete with fire pump, motor, controller, pressure maintenance pump (jockey pump), and accessories. The pumping system shall be listed by Underwriters Laboratories, Inc. and shall conform to all requirements of NFPA 20. See drawings for base bid and option bid items.

11.2 Pump shall be horizontal centrifugal split- case type. Pump shall be rated at 1000 gpm at 105 psi. Pumps shall furnish not less than 150 percent of rated capacity at not less than 65 percent of the total rated head. The shut-off head shall not exceed 120 percent of rated head. Split case pumps which are automatically controlled shall be provided with a listed float-operated air release not less than 1/2 inch in size, to automatically release air from the pump. Pressure gauges shall be installed on the suction and discharge sides of the pump in accordance with NFPA No. 20. An automatic circulation relief valve shall be provided. Pump shall be provided with a nameplate giving manufacturer's name, model number and pump discharge characteristics.

11.3 An electric motor shall be provided and shall be rated for continuous duty. Motors shall not be used at voltages in excess of 110 percent of rated voltage. Motor shall be non overloading at all points on pump curve.

11.4 Controller: All controllers shall be specifically listed for electric motor-driven fire pump service and installed in accordance with NFPA No. 20. Isolating means and circuit breaker shall be provided. A pilot power on lamp shall be provided. Supervisory signals shall be sent to the Fire Alarm System, Section 16721, to indicate either a motor running condition or loss of line power. Controller shall operate automatically and manually. A water pressure actuated switch having independent high and low calibrate adjustments responsible to the water pressure in the fire protection system shall be provided. Shutdown shall be accomplished manually and automatically.

11.5 Pressure Maintenance Pump (Jockey Pumps): Jockey pump shall be provided and shall have a rated capacity of 5 gpm and rated pressure of 50 psi. An electric motor and controller shall be provided.

12. Piping, General:

12.1 A test header shall be provided. The number and size of hose header valves and the header supply pipe size shall be in accordance with NFPA No. 20. Header shall be located three feet above grade. Hose valve threads shall be National Standard Fire Hose Thread type. Caps with chains shall be provided for each outlet. A ball drip valve shall be located in the pipe line to the hose header.

12.2 Relief valve shall be set to prevent pressure on the fire protection system in excess of that pressure which the system is capable of withstanding. Valve shall be installed in accordance with NFPA No. 20.

### 13. SLEEVES AND ESCUTCHEONS:

13.1 Pipe passing through walls, floors and partitions shall be provided with standard weight steel pipe sleeves. Sleeves through walls and finished spaces shall be flush. Where located in the floor construction the sleeves shall project not less than two inches above the floor line. Holes for pipe passing through floor slabs, walls or partitions with fire rated doors, corridor walls, and vertical service shafts shall be firestopped. Materials used for firestopping shall comply with the following as a minimum:

13.1.1 Be capable of preventing the passage of flame and hot gases sufficient to ignite cotton waste when subject to ASTM E 119 time-temperature fire conditions for two hours.

13.1.2 Flame Spread: 25 or less, ASTM E 84.

13.1.3 UL Classified Fill, Void, or Cavity material.

13.2 Provide escutcheons for pipes passing through walls, partitions and finished ceilings. Escutcheons shall be chrome plated steel.

### 14. INSTALLATION:

14.1 The waterflow device shall be installed on the discharge side of the deluge valve above the supervisory system check valve.

14.2 The deluge valve shall be fitted with an alarm bypass test connection in accordance with Section 3-17 of NFPA No. 13; so the waterflow device may be tested without opening of the deluge valve.

14.3 Provide all test and drain lines as required by Section 3-11 of NFPA No. 13. Pressure gauges, signs and other such standard appurtenances shall be furnished as required for a complete installation in accordance with NFPA No. 13. A nameplate data sign shall be provided at the main controlling valve to identify the system as a hydraulically designed system indicating the location and basis for design in accordance with Chapter 7 of NFPA No. 13.

14.4 All sprinkler piping shall be so installed that it can be thoroughly drained, and where practicable shall be arranged to drain at the main drain valve. The main drain valve shall be capable of a full discharge test without allowing water to flow onto the floor. All drips and drains shall conform to Section 3-11 of NFPA No. 13. All drain outlets discharging to the outside shall be located no higher than one foot above grade level.

14.5 Field changes in the piping layout or pipe sizes shall not be made without prior approval of the Contracting Officer.

14.6 Pipe supports, hangers, and clamps shall conform to and be placed in accordance with Section 3-15 of NFPA No. 13 and listed by Underwriters Laboratories, Inc., or approved by Factory Mutual.

14.7 Inspector's Test Valves shall be provided in accordance with Section 3-9 of NFPA No. 13, supplied from the highest and most remote part of the system in relation to the riser assembly, and shall discharge to the outside of the building or to a building drain. Test valves shall be conveniently accessible within seven feet of the floor.

14.8 Sterilization with a chlorinating material, approved by the Contracting Officer, shall be accomplished upon completion of the sprinkler installation and prior to placing the system in operation. The amount of chlorine applied shall be such as to provide a dosage of not less than 50 parts per million. The chlorinating materials shall be introduced into the water-supply lines and sprinkler systems in an approved manner. Following a contact period of not less than eight hours and not more than 12 hours, the chlorinated water shall be flushed from the system with clean water until the chlorine is not greater than 0.4 part per million. All valves in lines being sterilized shall be opened and closed several times during the eight hour period.

15. PAINTING: Exposed threads of all ferrous pipe shall be given one coat of corrosion resistant paint at the time of installation. After the system has passed all tests, all iron and steel parts shall be thoroughly cleaned. All piping and other metal that is exposed, except sprinkler heads, bronze, chrome or brass fittings, and moving parts shall be given a priming coat of red lead type paint conforming to Fed. Spec. TT-P-86G. A finish coat shall meet ANSI Z 53.1 and be federal safety red conforming to OSHA color coding. Concealed piping shall have four inch wide red painted bands placed at most every ten feet on center.

16. TESTING: Sprinkler systems shall be hydrostatically tested by the Contractor upon completion of the installation as required by Section 1-11.2 of NFPA No. 13 in the presence of the Contracting Officer or his designated representative. When hydrostatic and alarm tests have been completed and all necessary corrections made, the Contracting Officer shall be advised so as to permit final inspection and testing. At the final inspection, a material and test certification shall be provided in accordance with Section 1-12

of NFPA No. 13. The final tests shall be witnessed by a member of the GSA Regional Accident and Fire Prevention Branch. Final inspection shall include full flow testing through both the main drain and the inspector's test connection. Water shall flow out of the inspector's test connection within one minute after simultaneous opening of the deluge valve and the inspector's test valve. Equipment in areas being tested (during hydrostatic and final testing) shall be covered with polyethylene sheets to protect from accidental spilling of water.

END OF SECTION

## **SECTION 16010**

### **ELECTRICAL BASIC REQUIREMENTS**

#### **PART 1 - GENERAL**

##### **1.1 WORK INCLUDED IN THIS SECTION:**

1.1.1 This section of the specification applies to the furnishing and installation of electrical materials as specified in the following electrical sections.

1.1.2 The work includes, but is not limited to, the installation and connection of fire pump, fire pump controller, jockey pump, and the service to that equipment:

##### **1.2 GENERAL REQUIREMENTS:**

1.2.1 The Contractor shall submit proof, if requested by the Contracting Officer, that the materials, appliances, equipment or devices that he furnishes and installs under this contract, meet the requirements of all applicable Underwriters Laboratories (UL) Standards. The label of, or listing by, Underwriters Laboratories will be accepted as conformance with this requirement. In lieu of the label or listing, the Contractor may submit reports, done by testing agencies satisfactory to the Contracting Officer, indicating that the materials, appliances, or devices conform to the published standards, including methods of test, of Underwriters Laboratories.

1.2.2 The National Electrical Code (NEC) of the National Fire Protection Association (NFPA) shall apply to all electrical work in this project.

1.2.3 Appliances, equipment, and fixtures shall be current models for which replacement parts are available. Materials and equipment delivered to the site shall be stored and protected in such a manner as to effectively prevent damage from climatic conditions, condensation, dust, and physical abuse. Materials and equipment shall be installed and connected in accordance with manufacturer's instructions and recommendations. Each major component of equipment shall have the manufacturer's name, address, model number, and ratings on a plate securely affixed in a conspicuous place.

1.2.4 Conduits, wiring and equipment shall be arranged generally as indicated. Any change resulting in a savings in labor or materials shall be made only in accordance with a contract change order. Deviations shall be made only where necessary to avoid interferences and only after drawings showing the proposed deviations have been submitted to and approved by the Contracting Officer.

1.2.5 Drawings other than electrical drawings, and other sections of this specification may show or specify electrically operated equipment and wiring diagrams. All such drawings and specification sections shall be examined and characteristics of the required connections for all equipment for which wiring is to be provided shall be noted.

1.2.6 The motor horsepower and apparatus wattage ratings shown on drawings or specified herein are estimated values, and the corresponding sizes of feeders and other electrical equipment indicated to serve them are minimum sizes. Motors of greater horsepower and apparatus with larger wattage ratings may be furnished if necessary to meet the requirements of the various sections of the specification in which they are specified. Where larger motors or apparatus with larger wattage ratings are furnished, the feeders and other electrical equipment serving them shall be increased in capacity to correspond. The increase in the capacity of the feeder and other apparatus shall be furnished at no additional cost to the Government in each case in which the Contracting Officer determines that apparatus meeting the specification requirements and requiring a horsepower or wattage not exceeding that listed is available from two or more sources.

1.2.7 Electrical welders used in the erection and fabrication of the building and its equipment shall be provided with an independent grounding cable connected directly to the structure on which the weld is being made rather than to adjacent conduit or piping.

### 1.3 SUBMITTALS:

1.3.1 Submit shop drawings and catalog data within 30 days after the receipt of notice to proceed.

1.3.2 Submit shop drawings for each item and system listed below for which shop drawings are required elsewhere except where the information is included with manufacturers catalog data. Shop drawings shall show the ratings of items and systems and how the components of an item and system are assembled, function together and how they will be installed on the project. Data and shop drawings for component parts of an item or system shall be coordinated and submitted as a unit. Data and shop drawings shall be included in a single submission. Multiple submissions are not acceptable except where prior approval has been obtained from the Contracting Officer. In such cases, a list of data to be submitted later shall be included with the first submission.

1.3.3 Data and shop drawings shall be identified in accordance with section, "General Conditions". Shop drawings shall be identified by the name of the item and system and the applicable specifications paragraph number.

1.3.3.1 Catalog data shall be submitted for:

Mineral insulated cable

Mineral insulated cable fittings and connectors

Fire pump controller

Motor circuit protector circuit breaker

Wires and Cables

Motors

1.3.3.3 No item and system listed above shall be delivered to the site, or installed, until approved. After the proposed materials have been approved, no substitution shall be permitted except where approved by the Contracting Officer.

1.3.4 Should the Contractor fail to comply with the requirements of paragraph SUBMITTALS, the Government reserves the right to select its own choice of any or all items and systems listed in paragraph 1.3.3. Section shall be final and binding upon the Contractor. Materials so selected or approved shall be used in the work at no additional cost to the Government.

1.3.5 Unless otherwise provided, all items used shall be substantially the same as items of manufacture which, on the date of opening of bids, have been in successful commercial use and operation for not less than one year in projects and units of comparable size. The right is reserved by the Contracting Officer to require the Contractor to submit a list of buildings where specified items have been in operation, so that such investigation as may be deemed necessary may be made before approval.

#### 1.4 MANUALS:

1.4.1 In addition to and after approval of data and shop drawings, furnish to the Contracting Officer three copies of operation and maintenance manuals consisting of corrected copies of all catalog data, shop drawings, performance curves and rating data, applicable to the equipment furnished. Deliver all such material a minimum of 90 days before the start of operation by the Government.

#### 1.5 COORDINATION:

1.5.1 Coordinate the work of the different trades so that:

(1) Interferences between mechanical, electrical, architectural, and structural work, including existing services shall be avoided; and

(2) Within the limits indicated on the drawings, the maximum practicable space for operation, repair, removal, and testing of electrical equipment shall be provided.



1.5.2 All electrical materials and equipment shall be kept close as possible to ceiling, walls and columns, to take up a minimum amount of space.

1.5.3 Furnish and install all offsets, fittings and similar items necessary in order to accomplish the requirements of coordination without additional expense to the Government.

## PART 2 - PRODUCTS

2.1 MECHANICAL EQUIPMENT REQUIREMENTS: The electrical components of mechanical equipment such as motors, motor starters, control or pushbutton stations, float-or pressure-switches, solenoid valves, and other devices functioning to control associated mechanical equipment are specified in the appropriate sections covering such work. Interconnecting wiring for components of packaged equipment shall be provided as an integral part of the equipment as specified elsewhere in the appropriate sections covering such work.

## PART 3 - EXECUTION

### 3.1 PAINTING AND FINISHING:

3.1.1 Factory finishes, shop priming, and special protective coatings are specified in the individual sections.

3.1.2 Where factory finishes are provided on equipment and no additional field painting is specified, all marred or damaged surfaces shall be touched up or refinished so as to leave a smooth, uniform finish at the time of final inspection.

### 3.2 SUPPORT OF ELECTRICAL ITEMS:

3.2.1 Unless otherwise indicated, all electrical items and their supporting hardware, including but not limited to, conduits, raceways, cabinets, boxes, and disconnect switches, shall be securely fastened to the building structure with the following methods. Fastening shall be done by wood screws or screw-type nails on wood; by toggle bolts on hollow masonry units; by concrete inserts or expansion bolts on concrete or brick; by machine screws, welded threaded studs, or spring-tension clamps on steel work. Threaded C-clamps with retainers may be used on rigid steel conduit only. Conduits or pipe straps shall not be welded to steel structures.

3.2.2 The load applied to any fastener shall not exceed one-fifth of the proof test load. Fasteners attached to concrete ceilings shall be vibration and shock-resistant.

3.3 REPAIR OF EXISTING WORK: The work shall be carefully laid out in advance, and where cutting, channeling, chasing, or drilling of floors, walls, partitions, ceilings, or other surfaces is necessary for the proper installation, support, or anchorage of the conduit, raceways, or other electrical work, this work shall be carefully done, and any damage to the building, piping, or equipment

shall be repaired by skilled mechanics of the trades involved at no additional cost to the Government.

### **3.4 CLOSING OF OPENINGS:**

**3.4.1** Wherever slots, sleeves or other openings are provided in walls, for the passage of conduits or other forms of raceway, such openings, if unused, or the spaces left in such openings after installation of the conduit or raceway shall be filled.

**3.4.2** Filling materials for openings in walls generally shall be fire-resistive and constructed and installed so as to prevent passage of water, smoke and fumes. Materials and installation shall conform to the requirements of the "Firestopping" section.

**3.4.3** Where conduits passing through the openings are exposed in finished rooms, the finishes of the filling materials shall match and be flush with the adjoining floor, ceiling or wall finishes.

**3.5 TESTS:** Feeders shall have their insulation tested after installation, and before connection. Tests shall be performed with a 500-volt megger, and conductors shall test free from short-circuits and grounds. Conductors shall be tested phase-to-phase and phase-to-ground. Motors shall be meggered after installation but before start-up, and shall test free from grounds. The Contractor shall furnish the instruments, materials, and labor, and the tests shall be performed in the presence of the Contracting Officer. Test readings shall be recorded and delivered to the Contracting Officer.

**END OF SECTION**

## SECTION 16050

### BASIC WIRING AND METHODS

#### 1. GENERAL:

1.1 Unless otherwise noted, all wiring shall be installed in rigid metal conduit, conduit specified below or as indicated on the drawings. Surface metal raceways shall not be used definitely shown on the drawings. Fibrous nonmetallic tubing (loom), nonmetallic sheathed cable, and armored cable (Bx or Type AC) shall not be used.

1.2 All wiring shall be furnished and installed complete from point of service connection to utilization equipment as indicated on drawings. Ample slack wire shall be provided for connections.

1.3 Cables shall not be bent, either permanently or temporarily during installation, to radii less than 10 times the outer diameters, except where shorter radii are approved by the Contracting Officer for conditions making the specified radius impracticable.

1.4 All conductors located in switchboards, motor controllers and pull boxes shall be neatly and securely cabled in individual circuits. Cabling shall be done with nylon straps made of self-extinguishing nylon having a temperature range of -65 degrees F. to +350 degrees F. Each strap shall be constructed with a locking hub or head on one end and a taper on the other.

#### 2. MOTOR CIRCUIT WIRING:

2. Mount and align all starters, control devices, and other related electrical equipment whether specified in this or other sections of this specification, except where such items are factory mounted on the driven equipment.

2.2 Furnish all wiring, including conduit, wire, junction boxes, disconnecting switches and overcurrent protection devices not specified elsewhere in this specification, to and between all motors, starters, control devices and related electrical equipment whether specified in this or other sections of this specification, except where such items are factory wired as well as factory mounted on the driven equipment.

2.3 All wiring to motors, control equipment and related electrical equipment shall be run in rigid metal conduit, with flexible metal conduit connections or liquid-tight flexible connections where required. Conduits shall be large enough to accommodate motor branch circuits and grounding conductors whether or not so indicated on

drawings. Wire sizes shall be as shown, or, if not shown, as required by the NEC.

### 3. CONDUIT AND FITTINGS;

3.1 Threaded steel conduit shall be in accordance with Fed. Spec. WW-C-581E. Conduit shall be zinc-coated on the outside and shall be either zinc-coated or coated with an approved corrosion-resistant coating on the inside.

3.2 Flexible metal conduit (commercial Greenfield) shall be in accordance with Fed. Spec. WW-C-566C.

3.3 Fittings for threaded steel conduit shall be in accordance with Fed. Spec. W-F-408C, except that the material shall be either iron or steel.

3.4 Bushings for threaded steel conduit shall be of the insulated type, designed to prevent abrasion of wires without impairing the continuity of the conduit grounding system. The insulating insert shall be made of thermosetting or fiber material which conforms to the flame test requirements of UL 514, molded or locked into the metallic body of the fitting. Conduit bushings made entirely of nonmetallic material shall not be used.

3.5 Fittings for flexible metal conduit shall be in accordance with Fed. Spec. W-F-406B. Fitting shall be made of steel or malleable iron and shall be of one of the following types:

(1) Wedge and screw type having an angular wedge fitting between the convolutions of the conduit.

(2) Squeeze or clamp type having a bearing surface contoured to wrap around the conduit and clamped by one or more screws.

(3) Steel, multiple point type, for threading into internal wall of the conduit convolutions

3.6 Flexible conduits shall be used for connections to motors and other electrical equipment when it is subject to movement, vibration, misalignment, cramped quarters or where noise transmission is to be eliminated or reduces.

3.7 Exposed conduits shall be run parallel to or at right angles to the lines of the building. All bends shall be free from dents or flattening.

3.8 Conduit runs shall be mechanically and electrically continuous from service entrance to all outlets. Unless otherwise specified, each conduit shall enter and be securely connected to a cabinet, junction box, pull box or outlet box by means of a locknut on the outside and a bushing on the inside or by means of a liquid-tight, threaded self-locking, cold-weld type wedge adapter. Where nominal circuit voltage exceeds 250 volts, an additional locknut shall be

provided, one locknut being inside and one locknut outside and in flexible metal conduit, the one locknut shall be made wrench-tight. All locknuts shall be the bonding type with sharp edges for digging into the metal wall of an enclosure and shall be installed in manner that will assure a locking installation. Locknuts will not be required where conduits are screwed into tapped connections.

3.9 The minimum size of threaded conduit, and flexible metallic conduit shall be in accordance with the NEC but shall not be less than the size shown on the drawings whenever such sizes are shown.

3.10 The size of all raceways shall be checked to determine that the green equipment ground conductor, specified, shown, or required can be installed in the same raceway with phase conductors in accordance with the percentage of fill requirements of NEC. If necessary, sizes of conduit, shown or specified shall be increased to accommodate all conductors without additional cost to the Government.

3.11 Unless otherwise specified or shown on the drawings, all conduit shall be installed concealed. Conduit may be run exposed on unfinished walls, unfurred basement, ceilings, in switchgear rooms and pump rooms.

3.12 Every conduit system shall be installed complete before any conductors are drawn in. Each run of conduit shall be blown through before conductors are installed.

#### 4. CONDUIT SUPPORTS:

4.1 Pipe straps shall be Type 1, Style A or Style B, in accordance with Fed. Spec. FF-S-760A.

4.2 Individual pipe hangers, and all parts and hardware shall be zinc-coated throughout. All U-bolts, clamps, attachments, and other hardware necessary for hanger assembly, and for securing hanger rods and conduits shall be provided.

4.3 Pipe straps and hanger rods shall be fastened to surfaces as specified under "Support of Electrical Items" paragraph in the "ELECTRICAL, GENERAL PROVISIONS" section.

4.4 All conduits shall be securely and independently supported so that no strain will be transmitted to pull box supports. Supports shall be rigid enough to prevent distortion of conduits during wire pulling.

4.5 Individual horizontal conduits shall be supported by one-hole pipe straps or separate pipe hangers for sizes 1-1/2-inch and smaller, and by separate pipe hangers for larger sizes. Wire shall not be used as a means of support.

4.6 Branch circuit conduits above suspended ceilings may be supported from the floor construction above or from the main ceiling support members.

**5. WIRES AND CABLES:**

**5.1 General:**

**5.1.1** Unless otherwise indicated or specified, wires or cables shall be rated for 600 volts minimum.

**5.1.2** Unless otherwise specified, all wires and cables for secondary service, feeders, and branch circuits (except MI cable) shall be of the single conductor annealed copper type, and shall be in accordance with Fed. Spec. J-C-30A.

**5.1.3** Unless otherwise specified, indicated on the drawings, or higher rating is required by the NEC, conductors shall have at least 90 degree C. rated insulation.

**5.2 Mineral Insulated:** Conductors, where indicated on the drawings, shall be of the mineral-insulated, metal-sheathed cable. Cable shall be either single conductor or multi-conductor, with a highly compressed refractory Magnesium Oxide mineral insulation encased in a continuous copper sheath. Cable shall be installed in strict accordance with manufacturer's instructions. Cables supplied under this contract shall be UL classified as having a two hour fire rating.

**5.2.1** Support cable at not more than 5-feet intervals, by means of straps, hangers or other fittings specifically designed for the purpose.

**5.2.2** At termination points provide cable with an approved seal immediately after stripping to prevent entrance of moisture into the mineral insulation. Encase conductors beyond the sheath in a recommended type insulating sleeve.

**5.2.3** When mineral insulated cable is connected to boxes or other equipment. Provide factory fabricated fittings suitable for the service conditions. Fittings shall be of the threaded-gland type with "Screw-on pot" seals filled with an insulating compound designed for the atmospheric and service conditions in which the cable is used.

**5.2.4** Stripping of cable ends, installation of fittings, application of insulating compound, and actual cable terminations shall be made according to manufacturer's specific instructions.

**5.3 Splices and Terminations:**

**5.3.1** Terminations or splices for stranded conductors No. 6 and larger shall utilize indent, hex screw, or bolt clamp-type connectors, with or without tongue, as approved by the Contracting Officer for the particular application. Connectors shall have not less than two clamping elements or compression indents. All wire and cable connectors shall be of high conductivity corrosion-resistant material, and have ampere capacity which must at least equal solderless connections and must also conform to Fed. Spec. W-S-610C.

**5.3.2** All insulating materials for splices and connections such as rubber, friction, varnished cambric, asbestos, glass and synthetic tapes, putties, resins, splice cases, or compositions shall be of the type approved for the particular use, location, and voltage and shall be applied and installed in an approved manner, all in accordance with the manufacturer's and the Contracting Officer's recommendations.

**5.3.3** Plastic electrical insulating tape for use in lieu of rubber and friction tape shall conform to Fed. Spec. HH-I-595C and shall be flame retardant.

**5.3.4** Rubber electrical insulating tape shall be noncorrosive to copper, self-fusing and have a minimum of 350 volts per mil dielectric strength and shall further meet the requirements of Fed. Spec. HH-I-553B.

**5.3.5** All terminals and connectors shall be torqued at least to the minimum values listed in Underwriters Laboratories Standard UL 486.

**5.4** Color Coding:

**5.4.1** Feeder conductors shall be color coded as follows:

Phase 480y/277 Volts

A Yellow

B Brown

C Orange

Neutral White

Ground Green

The colors shall be factory-applied entire length of the conductors by solid color compound or solid color coating.

**5.4.2** The solid color coating, shall be strongly adherent paint or dye not injurious to the insulation which will not be obliterated by pulling into a conduit or raceway.

**5.5** Wire Pulling:

**5.5.1** Suitable installation equipment shall be provided to prevent cutting and abrasion of conduits during the pulling of feeders. Ropes used for pulling of feeders shall be made of polyethylene or other suitable nonmetallic material. Metallic ropes shall not be used.

**5.5.2** Wire pulling lubricants, if used, shall conform to UL requirements applicable to the insulation and raceway materials used.

5.5.3 Pulling lines shall be attached to conductor cables by means of either woven basket grips or pulling eyes attached directly to the conductors, as approved by the Contracting Officer. Rope hitches shall not be used. All cables to be installed in a single conduit shall be pulled in together.

6. JUNCTION BOXES: All junction boxes shall be installed so that covers are accessible after completion of the installation. Junction boxes shall not be installed above suspended ceilings, except where the ceiling is of the removable type or definite provision is made for access at a point close to each box.

7. PULL BOXES:

7.1 Pull boxes shall conform to the applicable requirements of the NEC and boxes over 100 cubic inches in volume shall also conform to UL 50, except as modified below. Sheet metal boxes shall be adequately supported to maintain shape. Larger boxes shall be adequately formed of structural steel bracing welded into a rigid assembly shall be provided to maintain alignment in shipment and installation. Covers shall be secured by corrosion-resistant screws and bolts.

7.2 Pull boxes shall be not smaller than 8 inches square by 4 inches deep.

8 Motor circuit Protectors: Circuit breakers shall be rated for the voltage of the circuit on which they are used. Circuit breakers shall have a minimum interrupting rating of 22,000 amperes symmetrical, unless a greater rating is shown on the drawings. Breakers shall have a common trip mechanism. Breakers shall be quick-make, quick-break, magnetic type and shall be trip-free. Devices with adjustable magnetic trip shall be factory set to the "low" value which shall allow for at least 7 times the full load current of the fire pump.

9. GROUNDING:

9.1 The grounded neutral of the secondary distribution system shall be supplemented by an equipment grounding system to properly safeguard equipment and personnel. The equipment grounding system shall be designed so all metallic structures, enclosures, raceways, junction boxes, outlet boxes, cabinets, machine frames, portable equipment and other conductive items in close proximity with electrical circuits operate continuously at ground potential and provide a low impedance path for possible ground fault currents. The system shall comply with the National Electrical Code, as hereinafter specified.

9.2 Low voltage distribution systems shall be provided with a separate green insulated equipment grounding conductor for each three-phase feeder with a three-phase protective device. The required grounding conductor shall be installed in the common conduit with the related phase.



9.3 The completed equipment grounding system shall be subjected to a megger test at each ground bar to insure that the ground resistance, without chemical treatment or other artificial means, does not exceed five (5) ohms. Certified test reports of the ground resistance shall be submitted to the Contracting Officer for approval. Necessary modifications for compliance with the five (5) ohm value should be reflected in the contract price without additional expense to the Government.

9.4 Where conduits terminate without locknuts and bushings or other mechanical connection to a metallic housing of electrical equipment. Each conduit shall be provided with a ground bushing and each bushing connecting with a bare copper conductor to the ground bus in the electrical equipment. The ground conductor shall be in accordance with the article on Grounding of NEC. Electrically non-continuous metallic conduits containing ground wiring only shall be bonded to the ground wire at both conduit entrance and exit in a manner similar to that described above.

END OF SECTION

## SECTION 16723

### FIRE ALARM SYSTEM

1. **APPLICABLE PUBLICATIONS:** Unless otherwise indicated, the system, its specified components, their installation and operation shall conform to the applicable requirements of the following publications:

1.1. **National Fire Protection Association (NFPA):**

No. 70-1984      National Electrical Code

No. 72A-1985      Standard for the Installation,  
Maintenance and Use of Local  
Protective Signaling Systems for  
Guard's Tour, Fire Alarm and  
Supervisory Service

No. 101-1985      Life Safety Code

1.2 **Underwriters Laboratories (UL):**

Fire Protection Equipment Directory  
(January 1986)

Electrical Construction Materials Directory  
(May 1985)

Building Materials Directory (January 1986)

1.3 **Factory Mutual Engineering Corporation (FM):**

Approval Guide 1986

1.4 **General Service Administration (GSA):**

PBS P 5900.2B, Accident and Fire  
Prevention-General

1.5 Acceptable evidence of devices and equipment, unless otherwise specifically indicated, is a UL listing or FM label, for its intended use, satisfactory to the Contracting Officer, that the devices and equipment meet the applicable standards. All devices and equipment shall be products being manufactured and having the required UL listing or FM label, for its intended use, at the date of bid opening.

2. **DESCRIPTION:**

2.1 This section of the specification includes the installation of a fire pump and cooling tower fire protection as described herein and shown on the drawings for the New Executive Office Building, Washington, D.C. Multiplex or addressable type systems which use a common circuit for multiple signals shall not be installed under this contract. The alarm system modifications shall include sprinkler valve supervision, and fire pump supervision.

2.2 The system shall include all wiring; raceways; pull boxes; terminal cabinets; outlet and mounting boxes; control equipment; alarm, pre-alarm, and supervisory signal initiating devices; alarm indicating devices; and all other accessories and miscellaneous items required for an operating system even though each item is not specifically mentioned or described.

2.3 The system shall be installed in accordance with the drawings, specifications and referenced publications. In case of conflict of requirements, the requirements in GSA Handbook PBS P 5900.2B shall govern.

2.4 Existing fire alarm equipment is to remain fully operational until the new equipment has been tested and accepted by the Government. As new equipment is installed, it shall be labeled "NOT-IN-SERVICE" until the new equipment is accepted. Once the new system is complete, tested, and accepted it shall be placed in service.

### 3. QUALITY ASSURANCE:

3.1 Installation shall be accomplished by an electrical contractor with a minimum of five years experience in the installation of fire alarm systems. The Contracting Officer may reject any proposed installer who cannot show evidence of such qualifications. The services of a technician provided by the control equipment manufacturer shall be provided to supervise installation, adjustments and tests of the system.

3.2 The Contractor shall furnish evidence that there is an experienced and effective service organization which carries a stock of repair parts for the system to be furnished. The Contractor shall guarantee labor, materials and equipment provided under this contract against defects for a period of one year after the date of final acceptance of this work by the Government and the receipt of as built drawings and schematics of all equipment. Repair and/or replacement parts for the system to be furnished shall be available for a period of ten years after the date of final acceptance of this work by the Government. Service during the guarantee period shall be provided within two hours after notification and all repairs shall be affected within twenty four hours after notification. Should the Contractor fail to comply with the above requirements, the Government will then have the option to make the necessary repairs and back charge the Contractor without any loss of warranty or guarantee as provided by the Contract documents.

### 4. DEFINITIONS:

4.1 Fire Alarm Signal: A signal which signifies a state of emergency requiring immediate action such as an alarm for fire from a manual station or a suppression system switch; and requires immediate notification of the fire department.

4.2 Supervisory Signal: A signal which signifies an impairment of a fire protection system which may prevent its normal operation.

4.3 Trouble Signal: A signal which signifies that a fault, such as an open circuit or ground, has occurred in the system.

4.4 Point Wired System: A system where alarm initiating, pre-alarm initiating, and/or supervisory signal initiating devices are directly connected to a central control panel via multiple conduction paths (initiating device circuits), without multiplexing, to initiate the specified response.

4.5 Fire Alarm Zone: Any fire alarm initiating device or combination of devices connected to a single fire alarm initiating device circuit.

4.6 Supervisory Zone: Any supervisory signal initiating device or combination of devices connected to a single supervisory signal initiating device circuit.

4.7 Communication Zone: Any fire alarm indication device or series of devices arranged visually and/or audible indicate a fire alarm signal.

4.8 Class A Operation: A circuit that is electrically supervised such that a single break or a single ground fault condition will be indicated by a trouble signal on the Fire Alarm Control Panel, and is capable of operation for its intended service during the single break or single ground fault condition, no matter where the break or ground fault occurs.

4.9 Class B Operation: A circuit that is electrically supervised such that a single break or single ground fault condition will be indicated by a trouble signal on the Fire Alarm Control Panel no matter where the break or ground fault condition occurs.

## 5. SYSTEM OPERATION:

5.1 All fire alarm system circuits shall be electrically supervised.

5.2 Automatic response functions shall be initiated only by the first fire alarm received and annunciated, but a second alarm shall not initiate the automatic functions unless the first fire alarm zone is returned to normal.

5.2.1 The operation of a waterflow switch shall:

a) initiate the operation of an existing relay to transmit a suppression alarm signal to the existing central station transmitter.

b) cause an indication of the device location by device type, by zone and by floor on the exist. Fire alarm control panel and on the exist. graphic annunciator.

c) cause an audible alarm signal at the exist.  
FACP.

d) transmit audible and visual signals to all floors of the building through existing devices.

e) record all events on the existing system printer.

5.2.2 Operation of automatic sprinkler system control valve tampers shall:

a) initiate the operation of an existing relay to transmit a valve tamper supervisory signal to the existing central station transmitter.

b) cause an indication of the device location by device type, by zone and by floor on the existing FACP and on the existing graphic annunciator.

c) cause an audible supervisory signal at the existing FACP.

d) record all events on the existing system printer.

5.3 The maximum time period from actuation of any initiating device until its indication on the FACP shall be ten seconds.

5.4 The waterflow switch input functions (using supervised normally open contacts) shall be indicated and the building fire alarm evacuation system shall be initiated as herein-before described.

5.5 The following input functions (using supervised normally open contacts) shall be indicated and shall cause a supervisory signal to sound at the fire alarm control panel:

a. Control valve tamper switch

## 6. ELECTRICAL SUPERVISION:

6.1 Supervision shall be in accordance with NFPA No. 72A and the minimum requirement listed below: All wiring shall be Class A.

6.2 The circuits listed below shall be supervised so a single break or a single ground fault condition will be indicated by zone with a trouble signal on the FACP:

a. Alarm, and supervisory signal initiating device circuits from the FACP to the initiating devices.

b. Alarm notification circuits from the FACP to the central station service transmitter relays.

c. Annunciator circuits from the FACP to the graphic annunciator.

d. A break or ground fault condition on the circuits listed above shall be indicated by zone with a trouble signal on the FACP and shall transmit a system trouble (trouble signal) to the existing building fire alarm system via an existing relay

## 7. SUBMITTALS:

### 7.1 Shop Drawings:

7.1.1 Shop drawings shall be submitted to the Contracting Officer within 30 days of the notice to proceed for approval prior to installation. The submittal shall be a complete set. Partial submittals will not be acceptable. Six copies of the shop drawings shall be submitted.

7.1.2 The submittal shall include complete schematic circuit diagrams for all equipment including panel modules; wiring diagrams showing connections between all system components, both field and panel wiring; description of system operation; annunciator schedule showing titles for each fire alarm, pre-alarm, and supervisory signal zone; detailed drawings of the graphic annunciator; and manufacturer's literature marked to show model and catalog number for all equipment.

7.1.3 The submittal shall also include complete floor plans showing the location of all devices and equipment in accordance with Section 1.2 of NFPA No. 72A. In addition, complete riser diagrams (with color code schedule) indicating wiring sequence of all devices and control equipment shall be submitted.

7.1.4 Electrical drawings shall not be on less than 8-inch by 10-1/2-inch sheets and shall identify all symbols used. The complete schematic shall be on a single sheet drawing with all circuit terminals and interconnections identified.

7.2 Instruction Manuals: Prior to final acceptance testing of the entire system and for use during instruction periods, the Contracting Officer shall be furnished five bound copies of operation and maintenance manuals including an index, copies of all approved shop drawing submittal materials, except that diagrams and drawings shall be as-built, and a complete parts list. A spare parts list shall also be

provided that indicates manufacturer's name, serial number, order number, size, and operating characteristics.

### **7.3 As-Built Drawings:**

7.3.1 Detailed as-built drawings shall be prepared and submitted to the Contracting Officer. The drawings shall include wiring diagrams showing connections between all devices and equipment, both panel and field wiring, riser diagrams, and indicating the locations of all devices and equipment. The drawings shall also show the system as installed including all deviations from the approved shop drawings. The drawings shall be on uniform size sheets no smaller than 30 inches by 42 inches.

7.3.2 Five sets of as-built drawings shall be provided.

7.4 Final acceptance tests by the Contracting Officer will be made only after receipt of the as-built drawings and instruction manuals.

### **8. ALARM INITIATING DEVICES:**

8.1 Disconnection of any single alarm initiating device shall cause a trouble signal at the FACP, but shall not inhibit the operation of any other initiating device.

### **9. SUPERVISORY SIGNAL INITIATING DEVICES:**

9.1 Disconnection of any single supervisory signal initiating device shall cause a trouble signal at the existing FACP, but shall not inhibit the operation of any other initiating device.

9.2 Tamper Switch: Each sprinkler system control valve shall be equipped with a tamper switch; UL listed Extinguishing system Attachment for the particular location and type of valve supervised. The device shall contain double pole, double throw contacts. The switch shall initiate a supervisory signal upon a maximum of two complete turns of the valve wheel or closure of ten percent, whichever is less.

### **10. CONTROL EQUIPMENT:**

10.1 Terminate all wiring adjacent to the existing Fire Alarm Control Panel (FACP) in the guards office on the ground floor where shown. Final connections shall be made by Government personnel.

### **11. INSTALLATION:**

11.1 Each fire alarm and supervisory signal initiating device circuit shall be wired for Class A operation.

11.2 Each fire alarm indicating device circuit shall be wired for Class A operation.

11.3           Wiring Within Component Enclosures and Terminal Cabinets: All wiring shall be installed in a neat and workmanlike manner and shall be trained parallel with or at right angles to the sides and back of any enclosure or cabinet. All circuit conductors broken, spliced, or connected in any enclosure, cabinet, mounting or junction box shall be connected to terminal blocks with each terminal marked in accordance with the wiring diagram for identification. Connections shall be made with either crimp-on terminal spade lugs or with approved pressure type terminal blocks. A terminal cabinet shall be installed where any circuit tap is made. All wiring within the enclosure shall be readily accessible without removing any component parts.

11.4           System Field Wiring: Field wiring shall be solid copper minimum No. 14 AWG size conductors. All conductors shall be installed in rigid metal conduit run concealed except where noted. Each conductor used for the same specific function shall be distinctively color coded. Two different color codes shall be used for initiating device circuits. Two separate colors shall be used for the alarm indicating circuits. Wiring for the fire systems shall be installed as herein described and separate from any other wiring systems.

11.5           Firestopping: Holes for conduit passing through floor slabs, walls or partitions with fire rated doors, corridor walls, and vertical service shafts shall be firestopped in accordance with NFPA No. 70. Materials used for firestopping shall comply with the following as a minimum:

11.5.1           Be capable of preventing the passage of flame and hot gasses sufficient to ignite cotton waste when subject to ASTM E 119 time-temperature fire conditions for two hours for wall penetrations and four hours for floor penetrations.

11.5.2           Flame Spread: 25 or less, ASTM E 84.

11.5.3           UL Classified Fill, Void, or Cavity Material.

12.           TESTS:

12.1           All testing shall be coordinated with and approved by the Contracting Officer. A letter certifying that the installation is complete and fully operable shall be forwarded to the Contracting Officer. The letter shall include the names and titles of witnesses of the preliminary tests. The Contractor and an authorized representative from each supplier of equipment shall be in attendance to make necessary adjustments related to the testing. The final tests shall be witnessed by a member of the GSA Regional Accident and Fire Prevention Branch.

12.2           As minimum requirements, the system shall be tested in accordance with the requirements of Chapters 2 and 4 of NFPA No. 72H; Chapter 8 of NFPA No. 72E; and in addition to show that:

a. The complete system is free from grounded or open circuits.



b. Each fire alarm, and supervisory signal initiating device functions as specified and produces the specified actions.

c. Abnormal condition of any circuit or device required to be electrically supervised shall result in the specified trouble signals.

d. Each alarm indicating device functions as specified.

e. The system is operable under the specified trouble conditions.

END OF SECTION



General Services Administration  
Public Buildings Service  
Washington, DC 20405



30 JUN 1989

MEMORANDUM FOR PLANNING AND PROJECT REVIEW BOARD  
PD, PF, PL, PQ, 3A, 8A

FROM: THOMAS H. WALKER  
ASSISTANT COMMISSIONER FOR  
REAL PROPERTY MANAGEMENT AND SAFETY - PM

SUBJECT: Firesprinkler Projects  
New Executive Office Building ✓ DC 010522  
National Courts Building  
Washington, DC

The board requested that we review the National Capital Region's study to install firesprinklers in the subject buildings. We compared the asbestos control procedures planned with those being used in similar projects. It appears that the region is anticipating more significant problems with the asbestos controls and tenant involvement than is being experienced in the Cleveland, Ohio, project. Our detailed evaluation is attached.

Until bids are received on four similar firesprinkler projects later this summer, we recommend that no further action be taken. We can pursue additional discussions with the region after the bids are finalized. There is no urgency to make a decision at this time because the region plans to request construction funding in fiscal year 1992 at the earliest. Design funds are included in the 1990 budget so the project's start will not be delayed. Any additional design funds, if required, can be provided in 1992, and the award can still be made late in the fiscal year.

Attachment

4th Bldg  
WPX  
F.P.I. +  
discuss  
WJC

HIGH-RISE FIRE SPRINKLER  
NEW EXECUTIVE OFFICE BUILDING  
NATIONAL COURTS BUILDING  
WASHINGTON, DC

The National Capital Region's (NCR) study of the proposed sprinkler installations using the National Institute of Standards and Technology methodology for working in an asbestos environment has been reviewed. It was analyzed to compare the procedures being used in the Cleveland, Ohio, and Los Angeles, California, projects which have been awarded to those proposed by the NCR. This evaluation was to determine if the difference in costs between the ongoing projects and those planned in the NCR were the result of different techniques or procedures. After reviewing the study, the main difference identified are in the asbestos control procedures. Those in the NCR plan are more stringent than currently employed in the Cleveland project:

- Independent air monitoring by a contract separate from the construction contract to conduct air sampling throughout the project.
- Independent project oversight by a contract industrial hygienist.
- Analysis of air samples by transmission electron microscopy.
- Full containment enclosure for the work area which includes installation/ removal of a barrier above the ceiling.
- Repair of asbestos materials when the above ceiling barrier is removed.
- Negative air pressure within the enclosure with continuous recording of results with four air changes per hour.
- Tagging of all air terminals and smoke detector openings.
- Recording the condition of all existing asbestos materials as the contract work progress.

It appears that the project is being planned more in line with a total removal project than with a localized control system to deal with the potential release of fibers.

The costs for the actual firesprinkler installation in the Cleveland and NCR projects are comparable. The major difference is in the additional asbestos control methods which are not necessary. Contracts on four similar projects are scheduled for award in fiscal year 1989. If the bids are received as expected, we will request the NCR to rescope the asbestos control methods to be appropriate with the actual conditions and needs.



General Services Administration  
Public Buildings Service  
Washington, DC 20405



30 JUN 1989

MEMORANDUM FOR PLANNING AND PROJECT REVIEW BOARD  
PD, PF, PL, PQ, 3A, 8A

FROM: THOMAS H. WALKER  
ASSISTANT COMMISSIONER FOR  
REAL PROPERTY MANAGEMENT AND SAFETY - PM

SUBJECT: Firesprinkler Projects  
New Executive Office Building  
National Courts Building  
Washington, DC

The board requested that we review the National Capital Region's study to install firesprinklers in the subject buildings. We compared the asbestos control procedures planned with those being used in similar projects. It appears that the region is anticipating more significant problems with the asbestos controls and tenant involvement than is being experienced in the Cleveland, Ohio, project. Our detailed evaluation is attached.

Until bids are received on four similar firesprinkler projects later this summer, we recommend that no further action be taken. We can pursue additional discussions with the region after the bids are finalized. There is no urgency to make a decision at this time because the region plans to request construction funding in fiscal year 1992 at the earliest. Design funds are included in the 1990 budget so the project's start will not be delayed. Any additional design funds, if required, can be provided in 1992, and the award can still be made late in the fiscal year.

Attachment

Wm B. B. B.  
WPX  
F. D. I. &  
discuss  
WJ  
WPC

HIGH-RISE FIRE SPRINKLER  
NEW EXECUTIVE OFFICE BUILDING  
NATIONAL COURTS BUILDING  
WASHINGTON, DC

The National Capital Region's (NCR) study of the proposed sprinkler installations using the National Institute of Standards and Technology methodology for working in an asbestos environment has been reviewed. It was analyzed to compare the procedures being used in the Cleveland, Ohio, and Los Angeles, California, projects which have been awarded to those proposed by the NCR. This evaluation was to determine if the difference in costs between the ongoing projects and those planned in the NCR were the result of different techniques or procedures. After reviewing the study, the main difference identified are in the asbestos control procedures. Those in the NCR plan are more stringent than currently employed in the Cleveland project:

- Independent air monitoring by a contract separate from the construction contract to conduct air sampling throughout the project.
- Independent project oversight by a contract industrial hygienist.
- Analysis of air samples by transmission electron microscopy.
- Full containment enclosure for the work area which includes installation/ removal of a barrier above the ceiling.
- Repair of asbestos materials when the above ceiling barrier is removed.
- Negative air pressure within the enclosure with continuous recording of results with four air changes per hour.
- Taping of all air terminals and smoke detector openings.
- Recording the condition of all existing asbestos materials as the contract work progress.

It appears that the project is being planned more in line with a total removal project than with a localized control system to deal with the potential release of fibers.

The costs for the actual firesprinkler installation in the Cleveland and NCR projects are comparable. The major difference is in the additional asbestos control methods which are not necessary. Contracts on four similar projects are scheduled for award in fiscal year 1989. If the bids are received as expected, we will request the NCR to rescope the asbestos control methods to be appropriate with the actual conditions and needs.



Date : 6 JUL 1984  
Reply to : Chief, Planning and Project Control Staff (WPCL)  
Attn of :  
Subject: Sprinklers, New Executive Office Building,  
Washington, D.C., GS-11B-48027, RDC 48027  
To : Chief, Accident and Fire Prevention Branch (WPBA)

We have received a Project Authorization for the subject project in the amount of \$245,000 to provide sprinklers for two basement levels, first floor and second floor.

During the development of the Scope of Work we discovered that asbestos fireproofing was used in this structure which must be disturbed to install the sprinkler system. Since this fireproofing is exposed in the return air plenum system of the building it should be removed.

Removal is very costly since the area involved is the main entrance to the building and includes several public areas as well as the cafeteria.

Asbestos removal and a change to a Halon system in certain areas of the library have increased the construction cost to \$1,850,400.

62" Lib.  
70" ASB only

Due to the design of the HVAC system in this building we do not recommend the piecemeal removal of asbestos since there is considerable potential for contamination of occupied spaces. Consideration should be given to securing funds for a complete removal under one contract.

We have discussed these concerns with the Accident and Fire Prevention Branch, and find no suitable alternative course of action.

The project is being put on hold status pending receipt of your revised or canceling Project Authorization.

Please contact Mr. Joseph Antal on 472-4540, if you desire any further questions.

*Thomas W. Graves*

THOMAS W. GRAVES  
Chief  
Planning and Project Control Staff

Enclosure

1042  
Regional Administrator (WA)

Computer Center in the Executive Office  
of the President

Kerry Moody  
GSA White House Liaison (WPFK)

~~Hart~~ ~~W~~  
Don Sinsel  
~~W.H.~~ File  
New EOB

Attachment A is the chronology requested of Mr. Frank McCreery on February 19, 1982, concerning the planning, design and construction of the White House Office of Administration Computer Center (GS-11B-07028) located on the fourth floor of the New Executive Office Building. As you will see, everything that could be done within our regulatory authority was done to satisfy the White House requirements.

It is my understanding that Mr. McCreery and Mr. Cooper reviewed the additional work requested and determined that nearly all of the items listed in Mr. John F. W. Roger's letter, dated February 15, 1982, to me were not a part of the original contract and should be accomplished through work order requests to our White House Field Office. In fact, since receiving the letter, several are already underway. The emergency lighting has been checked by the Accident and Fire Prevention Branch and meets all safety requirements. Soundproof wall coverings were not included in any of the designs because they have proven ineffective in other computer rooms. Since the contractor was granted "substantial completion" on August 31, 1981, it would be unreasonable to request that he start anew with acoustical work and painting. Furthermore, the project does not reflect any savings and is close to the \$500,000 Congressional limit for non-prospectus projects.

I will hold off answering Mr. Roger's letter until I hear from you on the results of your meeting with him.

~~Copy~~ Bertrand G. Berube

BERTRAND G. BERUBE  
Regional Administrator

Attachment

**FOLLOWUP REQUIRED**

82/03/15

Concurrence:

WP \_\_\_\_\_ DATE \_\_\_\_\_  
JOHN T. MYERS

WPT Signed, Kenneth A. Jacobson \_\_\_\_\_ DATE APR 5 1982  
KENNETH A. JACOBSON

WPBA \_\_\_\_\_ DATE \_\_\_\_\_  
JAMES A. HAWKINS

WPTX \_\_\_\_\_ DATE \_\_\_\_\_  
FRANK D. McCREERY, JR.

WPFX \_\_\_\_\_ DATE \_\_\_\_\_  
DANIEL COOPER

cc: Official, Reading, Contract (WPTX) Reading (WPT) (WA-2) (WP-2)  
(AR-1) (WPBA-1) (WPFX-1)

WPTX:FMcCreery:slb:x22390:3/5/82



MAR 3 1982

CHRONOLOGY

Computer Center Extension  
New Executive Office Building  
Washington, DC  
GS-11B-07028

The Executive Office of the President, Office of Administration computer center is located on the fourth floor of the New Executive Office Building. This chronology presents the major chain of events from design through construction completion. This urgent project expanded the existing computer center from 3,800 square feet to 10,200 square feet.

FACTS:

1. On March 12, 1979, the Project Execution Branch (WPTX) conducted a survey for planned expansion of the White House Office of Administration (OA) computer center. That survey was completed on April 25, 1979, with an estimated project cost of \$626,000. This preliminary estimate was over the \$500,000 Congressional limit for non-prospectus projects and would require an exemption letter from OA to proceed with design.
2. On June 27, 1979, WPTX submitted another design survey with a reduced scope of work. The upgrade work originally planned for the existing computer center was deleted from the scope with a new cost estimate of \$481,000.
3. On July 9, 1979, WPTX started design of the reduced project for an additional 3,200 sq. ft. of computer space. OA approved the design and on November 13, 1979, the project was sent to the Contracts Division (WPP) for procurement with construction completion on June 2, 1980.
4. On October 26, 1979, Mr. J. Elmquist (OA) informed the Repair and Alteration Division (WPT) that Honeywell would be delivering the computer equipment on January 1, 1980.
5. On October 31, 1979, WPT requested that the ADP equipment delivery be delayed. Mr. Elmquist then agreed to a completion date of August 11, 1980.
6. On November 28, 1979, Mr. Elmquist notified WPT that the project had been cancelled after determining that the reduced scope would not satisfy long-range needs and that an exemption letter could not be provided.
7. On April 25, 1980, WPTX was asked to redesign the project based on new criteria established by the Agency's consultant, PDF Corporation. This criteria called for a 10,200 square foot facility. When told that this would exceed the \$500,000 limit for a non-prospectus project, Mr. James Gray (OA) stated that a letter certifying an exemption would be provided and that money was no object.

8. On May 19, 1980, Mr. Gray transferred an additional \$73,000 to GSA for the second design. Mr. Harden's (OA) letter to WA on June 6, 1980, requested completion by May 1981. Design was to start on June 6, 1980, however the environmental design data was not available until July 2, 1980.
9. A detailed review of the estimate provided by the PDF Corporation indicated that there were several omissions and that it was very low. WPTX immediately informed OA that the project cost would be around \$1 million. Again, WPTX was told that "money was no object" and that design should follow the detailed design criteria provided by their consultant, PDF Corporation.
10. After several meetings with OA to review in detail the WPTX preliminary cost estimate of \$1.2 million, it became apparent that OA did not plan on providing the letter certifying an exemption and that they did not have the funds to construct a project of this size.
11. On July 10, 1980, WPT again met with Mr. Gray and this time was told that the Agency could only provide \$360,000 to the \$450,000 being provided by GSA. He assured us that the exemption letter was on its way.
12. On July 16, 1980, Mr. Herb White, EOP Project Coordinator, informed WPT that OA had reservations about the WPTX cost estimate and that the project should be placed on hold until further notice.
13. On July 17, 1980, Mr. Myers (WP) sent a letter to Mr. Harden (OA) notifying him of the \$1 million cost estimate and again requesting the exemption letter and necessary environmental data.
14. On August 21, 1980, Mr. Walter Kallaur (WA) was briefed by Mr. Kenneth Jacobson (WPT) on the possibility of considering the raised flooring, mobile power centers, air-conditioning chillers, and air handlers as "operational equipment" to be furnished by the Agency. In this way a letter of exemption would not be required. With GSA furnishing \$450,000, the size of the new computer area would depend on the total dollars supplied by the Agency. Mr. Kallaur was to call Mr. Harden at the OA to again request the exemption letter for the entire \$1.2 million.
15. On September 3, 1980, WPTX met with Mr. Gray and outlined the plan to have OA fund the "operational equipment" and to clarify several design questions. The design was to be completed within six weeks.
16. The second design (\$73,000) was completed on October 24, 1980, with the use of "operational equipment" being funded by the White House.
17. Bids were opened on January 13, 1981, with Notice to Proceed granted to Elrich Construction Company, Inc. on March 3, 1981, for \$371,800. Permission to change the Repair and Alteration Program Plan for FY-81 was approved on February 17, 1981. The contract was for 180 calendar days and required completion by August 30, 1981.

18. On February 3, 1981, the GSA White House Field Office was given \$14,600 of R&A money to replace the ceiling tiles.
19. On March 23, 1981, Mr. White requested from Messrs. Stefanoff and Aitcheson that GSA prewire the circuits for the cypher locks; that GSA install a pass-through door between the storeroom and the computer room; that GSA install all new raised flooring in the existing computer room; and that GSA purchase the modular furniture for the computer room. Mr. McCreery agreed to prewire the cypher locks and install the pass-through box, but the other requests exceeded the scope of the project. The pass-through box did not get installed since Mr. White could not locate one that was UL rated for one hour.
20. On April 16, 1981, Mr. Gray and Mr. White met with Mr. Stefanoff (WPTX), Construction Architect, and insisted on a guarantee that the evaporative coolers would be installed by the scheduled completion date of August 30, 1981. The supplier had stated that delivery would be within the standard time of four to six weeks. Mr. White then personally called the supplier and was assured delivery on time if the Government paid an additional \$1,212 for expediting. GSA gave a change order for this amount for the guarantee.
21. On April 20, 1981, Mr. Gray called to say that Mr. Rogers was his new boss and that his job was "on the line" to complete the project. He said that he was directed by Mr. Al Osman to prepare a fact sheet discussing project acceleration for completion by July 15, 1981.
22. On May 8, 1981, Ms. Kadeck sent a letter to Mr. Kallaur stating that OA did not have the money to pay for shortening the completion date and to cancel the request.
23. On June 11, 1981, Mr. Rogers sent a letter to Mr. Jacobson requesting a 15-inch raised floor rather than the 12 inch designed and under construction. This issue had been discussed in depth since 1979 and the Agency (Mr. White) was still pushing for that height. With asbestos above the ceiling, GSA did not want to disturb it and create any lengthy environmental problems.
24. On July 8, 1981, Ms. Kadeck notified Mr. Kallaur that OA wanted to cancel the request for an additional 3 inches of clearance for the raised floor.
25. Note that all change orders for this project (\$27,000) were negotiated without any time extension being granted to the contractor for completion. On August 28, 1981, WPTX conducted a pre-final inspection with the contractor and granted "substantial completion" on August 30, 1981. The contractor still had some mechanical control work, door hardware installation, air and water balancing, the minor deficiencies and omissions items to correct, and fine tuning of the mechanical systems. Under normal circumstances, "substantial completion" would have been withheld and the contractor would have been charged "liquidated damages" of \$200 per calendar day of delay; however, the White House wanted to immediately move into the space. This basically eliminated control of the contractor for the rest of the items to be corrected.

26. Since August 30, 1981, WPTX has continued to work closely with the White House by immediately responding to all complaints. This has even included installation of the security system that OA was to have done by separate contract. The OA personnel have been inconvenienced by faulty hardware on the entrance doors and by air handlers cutting off; however, the electrical and mechanical systems have continuously functioned without any unscheduled downtime of the computer equipment. The following actions have taken place since August 30, 1981:
1. September 9, 1981 - Mr. Herb White called to say that he had a pass-through box that he wanted installed. WPTX immediately designed the opening and upon inspection of the box discovered that it was not UL rated and could not be installed.
  2. September 30, 1981 - GSA Accident and Fire Prevention Office conducted final system testing.
  3. October 29, 1981 - Johnson Control Company notified GSA they had not been paid by Commercial Heating for mechanical control work. Indications are that Commercial is going bankrupt.
  4. November 2, 1981 - Air balancing completed by contractor.
  5. January 11, 1982 - Heat tape on evaporator piping failed and caused a pipe to freeze. This was immediately corrected by the contractor and WPTX engineers.
  6. January 14, 1982 - The computer room was scheduled to shut down from 2:00 a.m. to 8:00 a.m. for GSA to fill the A/C system with glycol to prevent any further freeze-up.
  7. February 19, 1982 - An air handler piping joint leak was corrected by the mechanical contractor under the one-year warranty.
  8. February 22, 1982 - Hardware on the entrance doors corrected.
  9. February 24, 1982 - Water balancing contractor working, anticipate completion by March 12, 1982.
  10. February 26, 1982 - Air handler fuses blew. Field Office replaced fuses.
  11. March 4, 1982 - Security system installation to be completed by contractor.
  12. March 5, 1982 - Acoustical tile ceiling to be completed by Field Office.

G-11-98-048

**FACILITY AND FIRE SAFETY SURVEY  
OF**

**DC0105ZZ**

**NEW EXECUTIVE OFFICE BUILDING**

**725 17TH STREET, NW**

**WASHINGTON, DC**

**Prepared by: Events Analysis, Inc.**

**Item 06 Of Task Order No. P-11-98-DC-0080**

**FSES ANALYSIS RESULTS**

	<b>Fire Control</b>	<b>Egress</b>	<b>General Firesafety</b>
<b>Provided</b>	<b>13.0</b>	<b>3.5</b>	<b>13.0</b>
<b>Required</b>	<b>7.5</b>	<b>5.0</b>	<b>6.0</b>
<b>Equivalency</b>	<b>6.5 (Y)</b>	<b>-1.5 (N)</b>	<b>7.0 (Y)</b>

**NEW FINDINGS BY RAC LEVEL**

<b>RAC 1</b>	<b>0</b>
<b>RAC 2</b>	<b>0</b>
<b>RAC 3</b>	<b>0</b>
<b>RAC 4/5</b>	<b>10</b>

**SURVEY DATE APRIL 7, 1998**

**FPE NOTE: OMEGA SPRINKLERS IN BUILDING**

**FACILITY AND FIRE SAFETY SURVEY  
OF DC0105ZZ  
NEW EXECUTIVE OFFICE BUILDING  
725 17TH STREET, NW  
WASHINGTON, DC**

**1.0 INTRODUCTION**

Under Contract No. GS-11P92MJD0061, with the General Services Administration's (GSA) Safety and Environmental Management Division, Events Analysis, Inc., (EVA) is tasked to provide Facility and Fire Safety and Occupational Health and Safety Surveys of Federally occupied buildings in the National Capital Region.

This report details the results of the Facility and Fire Safety Survey of the New Executive Office Building (DC0105ZZ), that was conducted as Item No. 6 of Task Order No. P-11-98-DC-0080. The survey was conducted on April 7, 1998 by R. Eberly, PE, and G. Christensen, CSP.

There were a total of ten findings during this survey. None of the findings were deemed to be in the RAC 1-3 range. All ten findings were deemed to be in the RAC 4-5 range and are set forth in the Minor Findings Form at Appendix A.

The estimated gross square footage surveyed in this building is 450,000 square feet.

**OPEN FINDINGS SUMMARY:**

GSA has indicated that there are nine open findings on record for this building.

<b>Finding Number</b>	<b>Description</b>	<b>Status</b>
G-11-82-003 item 003	Exit discharge not protected	Open
G-11-91-189 item 010	Transformer vault ceiling friable	Open
G-11-91-189 item 006	No ventilation for battery charging	Closed - 1/
G-11-93-132 item 004	Exit discharge not protected	Open
G-11-97-026 item 001	Trash on roof	Closed
G-11-97-026 item 002	Chiller exhaust improper	Open
G-11-97-026 item 003	No R123 alarm	Open
G-11-97-026 item 004	No chiller emergency instructions	Open
G-11-97-026 item 005	No SCBA or SCBA training	Closed - 2/

1/ All batteries but 8 removed from vault

2/ GSA personnel trained in SCBA use.

Minor Findings ( RAC 4 and 5 ) are at Appendix A.

The building profile is at Appendix B.

The FSES analysis for the building is at Appendix C.

Findings with a RAC of 1, 2, or 3 are recorded on the GSA Form 3559 at Appendix D.

## **2.0 SURVEY METHODOLOGY**

### **2.1 Opening Conference**

The EVA survey representatives arrived on-site at the New Executive Office Building, 725 17th Street, NW, Washington, DC and an opening conference was held with Ms. Kerry Bonos, GSA White House Field Office. The EVA representatives reviewed the purpose of the visit and the procedures to be used during the conduct of the survey effort.

### **2.2 Applicable Standards**

During the conduct of the inspection, the following standards and guidelines were used to evaluate the fire safety conditions at the aforementioned facility.

- National Fire Protection Association (NFPA) Codes.
- Code of Federal Regulations, 29CFR1910 - General Industry Standard
- BOCA National Building Code.
- PBS/PQ-100 Facilities Standards for the Public Buildings Service - Chapter Seven, "Fire Protection Engineering"

### **2.3 Inspection Procedures**

The actual walk-through survey consisted of observing the condition of facilities, inspecting the condition of equipment, the storage of materials, and any operations in progress that may affect the physical facility or GSA owned or leased equipment, plus the layout of the equipment/materials in the facilities as they relate to fire safety. In addition, a review of the buildings fire safety features, e.g., fire detection/alarm systems, fire suppression systems (both fixed and portable), fire divisions and doors, emergency lighting and exit lights, and means of egress were conducted. Where potential hazards were identified, these were brought to the attention of the appropriate facility personnel and discussions of possible remedies were held.

### **2.4 Description of Facilities**

#### **2.4.1 New Executive Office Building**

The New Executive Office Building (NEOB) is a ten story office building with two below grade levels that was constructed in 1966. The two basement levels are used as a parking garage and include mechanical spaces and workshops. The building is rectangular in shape with an approximate gross floor area of 37,400 square ft. per floor. The building is occupied by the Executive Office of the President, and the Office of Management and Budget. The building is arranged with an H shaped central corridor running along each side of the building and providing access to the elevator lobby.

The occupied spaces includes mainly enclosed offices, a print shop on level 2B, a computer room on the fourth floor, a conference room on the second floor, a carpenter shop, loading dock and paper shredding area on the ground floor, workshops on the 1B level, an exercise facility on the second floor, and a library on the ground floor. The Secret Service occupies a portion of the second floor and the ground floor. An open two story atrium connects the first and second floors of the building, and is separated from the occupied areas by glass walls and doors. The building is a protected steel frame structure. The exterior of the building is brick and glass. The ceiling construction in the occupied areas consists of suspended tiles, while the ceilings in the corridors are drywall or plaster. This results in a construction classification of Type II (222) as defined by NFPA 220, and Type 2A construction as defined by the BOCA National Building Code. The occupancy in the building is classified as a Business Occupancy by NFPA 101 (Life Safety Code) criteria, and Use Group B by BOCA.

### **3.0 RESULTS**

Highlights of the facility and fire safety survey are contained in this section. Section 3.1 highlights the facility safety findings, Section 3.2 highlights the fire safety findings, Section 3.3 highlights the environmental management findings, and Section 3.4 highlights the indoor air quality findings. Many of the findings associated with these categories are described here as well as in Appendix A.

#### **3.1 Findings - Facility Safety Survey**

There were two facility safety findings recorded during this survey.

##### **3.1.1 Walking/Working Surfaces**

The walking and working surfaces consisted of carpeting in the office space, vinyl tile in the corridors and marble in the lobby. The floor surfaces observed were in good condition. There were no walking/working surface findings identified as a result of this survey.

##### **3.1.2 Electrical Systems**

The building is equipped with a standard three wire grounded electrical system and the continuity of the ground was confirmed during the survey. There was one finding regarding the electrical system identified.

Potentially wet areas were equipped with ground fault circuit interrupter (GFCI) protection with one exception noted. An electrical outlet near a sink in the health unit on the 6th floor did not have GFCI protection. GFCI protection should be provided.

##### **3.1.3 Machine Guarding**

Fixed machinery in this facility is that associated with the HVAC equipment. This equipment is maintained by the GSA in secure machine rooms. There were no findings regarding machine guarding.

##### **3.1.4 Emergency First Aid Equipment**

There were emergency eyewash fountains in the penthouse, chiller room and SB-214 steam room. Two observations were made regarding this equipment.

The operation of the eyewash fountain valve in the penthouse was obstructed by an abandoned water pipe. The piping should be removed to allow the valve to be opened fully.



A second observation was made regarding the eyewash in SB-214. The eyewash did not have a water supply as a control valve was closed. The valve was opened at the time of the survey and the fountain functioned normally. GSA should ensure the fountains are functioning properly by conducting periodic checks.

### 3.1.5 Material Handling & Storage

There was no special material handling equipment (i.e. cranes, manlifts, etc.) at this location.

### 3.1.6 Noise

There was one area (i.e. chiller room) occupied by Federal tenants that had noise levels in excess of the action level of 85 dBa established by OSHA. The chiller room was posted as a noise hazard area. No further action is necessary.

### 3.1.7 Illumination

The lighting criteria was obtained from 41 CFR 101-20-107, Energy Conservation Rule, Federal Property Management Regulations. The required light levels are:

- 50 Foot candles for work surfaces (taken to mean areas where reading is required)
- 30 Foot candles for work areas (taken to mean areas not requiring reading)
- 10 Foot candles for non-work areas (taken to mean aisles, corridors, etc.)
- 5 Foot candles for walking surfaces.

Lighting in the common areas consisted of fluorescent light fixtures. Lighting levels were considered adequate.

## 3.2 Findings - Fire Safety Survey

There were a total of eight fire safety findings recorded during this survey. All of the findings are considered RAC 4 or 5.

There were two existing fire safety findings reported for this building. The findings involve the protection provided for the exit discharge system. The building has been fully sprinkler protected, however, there are still concerns with the lack of a protected discharge path to the public way for 50% of the required exit capacity. The FSES analysis indicates that this building does not provide an equivalent level of protection as specified by NFPA 101. This is due to the present exit discharge arrangements.

### 3.2.1 Means of Egress

The building is served by four exit stairways, located at the remote ends of each corridor. Stairways # 1 and # 2 serve the west corridor of the building, and stairways # 3 and # 4 serve the east corridor. Stairway #1 discharges to an unprotected corridor leading to the ground floor lobby behind the guard desk. Stairway # 2 discharges to a protected corridor inside the Secret Service area on the ground floor of the building. Stairway #4 discharges to a protected corridor behind the library on the ground floor, that leads to the Jackson Place lobby. The lobby is considered an unprotected area because it is open to the second floor elevator lobby and is separated from the second floor occupied areas by glass barriers only. Stairway # 3B discharges to the third floor

corridor, where the occupants must travel approximately 100 feet along the unprotected corridor to reach stairway # 3A, which discharges to the ground floor elevator lobby. Rated fire doors released by magnetic holders connected to the fire alarm system separate the Jackson Place lobby from the 17th street lobby.

To leave the building on the 17th street side, the occupants would have to pass through three 16-1/2 inch wide turnstiles or a 40 inch wide gate, all of which are installed in a partition that is 36 inches high. These barriers must be manually released by the guard desk. The lobby access to 17th street is then through one set of 72 inch wide double doors or through two revolving doors. The exit discharge provisions in this building do not comply with the NFPA 101 criteria that at least 50% of the required exit capacity should discharge directly to the public way. This has been addressed in previous findings that remain open.

The total exit capacity for the four exit stairways is adequate for 546 occupants. Based on the Life Safety Code, the calculated occupant load for the building is 374 people, which is based on an allowance of 100 square feet per person. Therefore, the exit capacity for the building is adequate. The remote exits are separated by a straight line distance of approximately 265 feet. The diagonal of the building is approximately 358 feet. Therefore, the remoteness of the exits is adequate by NFPA 101 criteria, as they are separated by a distance which is equal to at least one-third the length of the maximum diagonal dimension of the sprinkler protected building. Three concerns were identified with the means of egress.

Exit access aisle are obstructed to 30 inches or less in many areas in this building. The obstructions consist of furniture, file cabinets, copier machines and other items. The obstructions should be removed from the exit access aisles and a minimum clear width of 44 inches should be maintained at all times. This condition was observed throughout the building, however, particular concerns were noted in the following areas: Rooms 10202 through 10215, room 10007, room 9208, room 8013, room 8026, and room 8026.

Surplus furniture and a ladder were observed stored on the landing of stairway # 4 at the second floor. All such materials should be removed from the exit.

The doors to stairway # 3B on the eighth floor, stairway # 2 on the seventh floor, stairway # 2 on the fifth floor, and stairway # 1 on the ground floor do not self close and securely latch. Repair and adjust these doors so they properly self close and latch.

### 3.2.2 Sprinkler, Standpipe, and Specialized Extinguishing Systems

Automatic sprinkler protection was recently installed throughout the building. The main feed enters the building through the 1 B level fire pump room. A 1000 gpm horizontal split case electric motor driven fire pump is installed on the system. Flow is detected by vane type flow switches located at the stair landings. Butterfly type control valves with internal supervisory switches are also installed on the risers. The water supply is directed to the upper floor by four combination standpipe / sprinkler system risers located in the stairways. There were three findings in this area.

In room 9235, four heads were observed that are within 3 feet of one another. It appears that an interior partition has been removed since the sprinklers were installed. Two of the heads should be removed and plugged to allow at least six feet of separation between the heads.

The sprinkler heads in the ground floor library were noted to be within 15 inches of the bookshelves. Either lower bookshelves that allow 18 inches clearance, or the sprinklers should be installed in each aisle space.

A taped and painted sprinkler head was noted in the ground floor carpenter shop dust collector closet. The tape should be removed from this head and if the head is painted, it should be replaced.

#### 3.2.2.1 Central Sprinkler Company - Omega Sprinklers

Omega flow control heads were noted in transformer vault B-202 (60 heads) and computer room 4220 (one head by main entrance doors). The Omega sprinklers should be replaced with approved alternative heads.

#### 3.2.3 Fire Separations

The fire separations of concern in this building are the enclosure of the exit stairs and the separation of the office areas from the mechanical rooms. The stairways are enclosed by concrete block construction and self closing Class B fire doors. The main mechanical equipment is located in the penthouse and the lower levels. There was one finding in this area.

Open holes, approximately four square feet in area were noted in the CMU shaft of stairway # 4 at the second floor. The openings are located above the suspended ceiling. The open holes should be sealed with approved non combustible materials capable of maintaining the required two hour rating.

#### 3.2.4 Fire Extinguishers

Six 2-1/2 gallon pressurized water fire extinguishers are located in the corridors on each floor of the building. Various sizes of carbon dioxide type extinguishers are located in selected office areas and copier rooms. The units were last inspected in October, 1998. Spacing and travel distance appear to be within the limits of NFPA 10. There were no findings identified in this area.

#### 3.2.5 Emergency Lighting and Power

Emergency lighting for this building is provided by wall mounted battery pack lighting fixtures. There were no findings in this area.

#### 3.2.6 Exit Signs

Internally illuminated LED type exit signs are provided in this building. The exit signs are located over the exit doors and in the corridors. The exit signs are powered from batteries if there is a power outage. There were no findings in this area.

#### 3.2.7 Alarm System

This building is provided with an automatic fire alarm system. The Edwards FAST control panel is located in the ground floor fire control room. The alarm system includes manual pull stations, smoke detectors, heat detectors, duct detectors, magnetic door holders, water flow alarms and tamper indicators, fire pump run/trouble indication, kitchen hood extinguishing system discharge indication, and cooling tower system discharge indication. The signaling devices are speakers and strobes. A selective evacuation pattern is used. Back up power for the system is provided by batteries. Central station service is provided by the GSA RCC and the Secret Service. A Pyrotronics System 3 sub-panel is provided in the fitness center. A Firelite Sensiscan 1000 local panel is also provided in computer room 4220. There were no findings in this area.

### **3.2.8 Documentation of Testing**

The building fire protection systems are tested by the GSA fire alarm shop. Both the sprinkler system and fire alarm system were recently installed and acceptance tested. There were no findings in this area.

### **3.2.9 Fire Safety Summary**

The New Executive Office Building appears suitable for continued occupancy by GSA. The exit discharge provisions should be corrected to bring the level of fire safety in this building up to that considered acceptable for Federal occupancy.

## **3.3 Findings - Environmental Management**

There were no findings concerning environmental management identified as a result of this survey.

### **3.3.1 Air Pollution Control**

There were no sources of air pollution observed such as an incinerator or fume hoods at this location.

### **3.3.2 Asbestos Abatement**

An asbestos determination has been conducted for this facility. Asbestos is known to exist as a sprayed on fireproofing material on the structural steel and on HTW and condenser water piping in pipe risers throughout the building. Abatement of ACM from some areas has been conducted. A control plan has been developed and training for managers provided. Ms. Kerry Bonos of the GSA White House Field Office has been designated as the GSA Facilities Asbestos Control Manager. She manages the control plan for the facility plan and provides oversight of abatement projects.

### **3.3.3 Water Pollution Control**

There were no operations noted or reported that could serve as significant water pollution emission sources.

### **3.3.4 Nonhazardous Waste Management**

Routine trash is removed daily by the GSA custodial service to a dumpster that is emptied daily. There were recycling programs for cans, paper and cardboard in effect.

### **3.3.5 Hazardous Waste Management**

There are no hazardous wastes generated by GSA or tenant agencies at this location.

### **3.3.6 Underground Storage Tanks**

There were no underground storage tanks associated with the operation of this facility.

### **3.3.7 PCB Management**

There were no PCB oil filled transformers at this location. Transformers located on the 1B level are diked and labeled as non-PCB transformers.

### 3.3.8 Pesticide Control

Reportedly, a GSA employee is a certified applicator at this location. There were no signs of insect or rodent infestation noted. Pesticides are stored on-site on the 1B level in the garage in a cabinet. The cabinet was not accessible during the survey. Reportedly, the GSA White House Office is aware of the types of pesticides stored and used within the building.

### 3.3.9 Special Occupancies

A well equipped carpenter shop is located in the loading dock area. The shop is equipped with a cyclone dust remover that is installed in a room isolated from the shop.

### 3.3.10 Environmental Management Summary

In summary, the environmental practices in this building are in compliance with GSA criteria. The building and/or its operation does not pose any major environmental concerns.

## 3.4 Findings - Indoor Air Quality

There were no indoor air quality findings identified as a result of this survey.

### 3.4.1 Ventilation

Heating is supplied in the form of steam from the west heating plant. Cooling is provided by new cooling towers with three Trane chillers. The ventilation system is a zoned system supplied by four supply and return fans located in the penthouse. In addition, ten exhaust fans are used to exhaust waste air from bathrooms and cafeteria areas. The fresh air intakes are located on the penthouse east and west walls. An enclosure surrounds the cooling towers on the roof.

From observation, the approximate quantity of the ventilation system was estimated to be in the order of 700,000 cfm. According to the engineer, the HVAC system is designed to provide 25% outside air at minimum. This equated to 195,000 cfm outside air for the entire building.

CO2 levels were also measured within the Federal occupied areas as a means of evaluating the efficiency of the ventilation system. CO2 readings were below the action level of 1000 ppm established by the GSA indicating adequate outside air is admitted into the leased space.

### 3.4.2 Complaints

There were no complaints regarding indoor air quality at the time of the survey.

### 3.4.3 Potential Contamination Sources

The chillers in the subbasement have been retrofitted to use R-123 refrigerant. R-123 is a group B1 (high toxicity - no flame propagation) refrigerant. The following information is presented for consideration.

- A monitoring system has been installed in the chiller room (not an ideal location). Ideally, the monitor should be located outside the entrance.
- The monitor is interfaced with an exhaust system and purge. An existing finding was open regarding the exhaust discharge point to the garage. Discharge of a large quantity of R-123 is potentially hazardous for any persons that happen to be in the garage.

- Manual purge controls were located outside the entrance to the chiller room. An existing finding was open regarding the lack of instructions or schematic being posted by the controls.
- The system was in "trouble". Reportedly this condition has been reported and a Trane representative is scheduled to service the system.
- A flashing light was present in the control room and outside the chiller room. Although there were no instructions posted regarding the purpose of the flashing light, the engineers were aware of its purpose. A flashing light was not present in the chiller room (also an existing finding).

#### 3.4.4 Maintenance

The air handling units are provided with a two inch pleated cartridge filters. The filters were clean at the time of the survey.

#### 3.4.5 Measurements

##### **Instrumentation**

Carbon dioxide concentrations were determined using Drager detector tubes. Results are determined by the reading of a color change produced by the reaction of the substance to be measured with reagents contained in the tube. Sampling was accomplished utilizing the Drager hand pump. The pump was leak tested before and after the survey.

- Light levels were measured with a Digital Illuminometer 93-1065F
- Temperature and humidity readings were taken with a Thermohygrometer HI-8564

##### **INDOOR AIR QUALITY READINGS**

LOCATION	DATE	TIME	TEMP/F	RH%	CO2/PPM
Room 10001	4/7/98	0950	74	11	400
Room 10236	4/7/98	0955	-	-	500
Room 10106	4/7/98	1000	-	-	400
Room 9216	4/7/98	1010	74	12	400
Room 9224	4/7/98	1015	-	-	400
Room 9206	4/7/98	1020	-	-	400
Room 9001	4/7/98	1025	-	-	400
Room 8103	4/7/98	1030	72	12	500
Room 8025	4/7/98	1035	71	11	400
Room 8222	4/7/98	1040	-	-	500
Room 7228	4/7/98	1045	72	13	500
Room 7002	4/7/98	1050	-	-	400
Room 7103	4/7/98	1055	-	-	600
Room 6013	4/7/98	1100	72	14	500
Room 6225	4/7/98	1105	-	-	400
Room 6218	4/7/98	1110	-	-	500

## INDOOR AIR QUALITY READINGS Cont.

LOCATION	DATE	TIME	TEMP/F	RH%	CO2/PPM
Room 5116	4/7/98	1120	72	12	500
Room 5236	4/7/98	1125	-	-	600
Room 5001	4/7/98	1130	-	-	400
Room 4208	4/7/98	1135	73	12	400
Room 4216	4/7/98	1140	-	-	500
Room 4106	4/7/98	1145	-	-	600
Room 3212	4/7/98	1155	72	13	600
Room 3221	4/7/98	1200	-	-	500
Room 3236	4/7/98	1205	-	-	500
Cafeteria-2nd Floor	4/7/98	1230	72	13	400
2nd Floor Lobby	4/7/98	1235	72	13	400
2nd Floor South	4/7/98	1240	-	-	400
G - 008	4/7/98	1250	73	12	400
G Level-Library G102	4/7/98	1255	-	-	500
G - 220	4/7/98	1300	-	-	500

## LIGHT LEVELS

LOCATION	DATE	TIME	LIGHT/FC
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There were no areas of dim illumination noted.

**APPENDIX A**  
**MINOR FINDINGS**



**MINOR SURVEY FINDINGS REPORT**

TO: White House PMC

DATE: 4/8/98

FROM: Events Analysis, Inc.

BUILDING NAME/LOCATION: New Executive Office Building, 725 17th Street, NW.

The following list of items has been identified for correction as a result of a Safety and Environmental Management Survey conducted on the date(s) indicated above. Please indicate the corrective action taken and provide your name in the space provided. Please forward the completed form to the Safety and Environmental Management Division (WPX). Please complete form within 60 calendar days of receipt of final.

---

**FINDING #: 1**

Exit access aisle are obstructed to 30 inches or less in many areas in this building. The obstructions consist of furniture, file cabinets, copier machines and other items. The obstructions should be removed from the exit access aisles and a minimum clear width of 44 inches should be maintained at all times. This condition was observed throughout the building, however, particular concerns were noted in the following areas: Rooms 10202 through 10215, room 10007, room 9208, room 8013, room 8026, and room 8026.

---

**CORRECTIVE ACTION:****DATE:** \_\_\_\_\_ **BY:** \_\_\_\_\_

---

**FINDING #: 2**

Surplus furniture and a ladder were observed stored on the landing of stairway # 4 at the second floor. All such materials should be removed from the exit.

---

**CORRECTIVE ACTION:****DATE:** \_\_\_\_\_ **BY:** \_\_\_\_\_

Sheet 2 of 4

BUILDING NO: DC0105ZZ  
BUILDING LOCATION: NEOB

---

**FINDING #: 3**

The doors to stairway # 3B on the eighth floor, stairway # 2 on the seventh floor, stairway # 2 on the fifth floor, and stairway # 1 on the ground floor do not self close and securely latch. Repair and adjust these doors so they properly self close and latch.

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**CORRECTIVE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_ **BY:** \_\_\_\_\_

---

**FINDING #: 4**

In room 9235, four sprinkler heads were observed that are within 3 feet of one another. It appears that an interior partition has been removed since the sprinklers were installed. Two of the heads should be removed and plugged to allow at least six feet of separation between the heads.

---

**CORRECTIVE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_ **BY:** \_\_\_\_\_

---

**FINDING #: 5**

Omega flow control sprinkler heads were noted in transformer vault B-202 (60 heads) and computer room 4220 (1 head by main entrance doors). The Omega sprinklers should be replaced with approved alternative heads.

---

**CORRECTIVE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_ **BY:** \_\_\_\_\_

---

Sheet 3 of 4

BUILDING NO: DC0105ZZ  
BUILDING LOCATION: NEOF

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**FINDING #: 6**

The sprinkler heads in the ground floor library were noted to be within 15 inches of the bookshelves. Either lower bookshelves that allow 18 inches clearance should be provided, or the sprinklers should be installed in each aisle space.

---

**CORRECTIVE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_ **BY:** \_\_\_\_\_

---

**FINDING #: 7**

A taped and painted sprinkler head was noted in the ground floor carpenter shop dust collector closet. The tape should be removed from this head and if the head is painted, it should be replaced.

---

**CORRECTIVE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_ **BY:** \_\_\_\_\_

---

**FINDING #: 8**

Open holes, approximately four square feet in area were noted in the CMU shaft of stairway # 4 at the second floor. The openings are located above the suspended ceiling. The open holes should be sealed with approved non combustible materials capable of maintaining the required two hour rating.

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**CORRECTIVE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_ **BY:** \_\_\_\_\_

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**FINDING #: 9**

An electrical outlet near a sink in the health unit on the 6th floor did not have GFCI protection. GFCI protection should be provided.

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**CORRECTIVE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_ **BY:** \_\_\_\_\_

---

Sheet 4 of 4

BUILDING NO: DC0105ZZ  
BUILDING LOCATION: NEOB

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**FINDING #:** 10

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The operation of the eyewash fountain valve in the penthouse was obstructed by an abandoned water pipe. The piping should be removed to allow the valve to be opened fully. A second observation was made regarding the eyewash in SB-214. The eyewash did not have a water supply as a control valve was closed. The valve was opened at the time of the survey. GSA should ensure the fountains are functioning properly by conducting periodic checks.

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**CORRECTIVE ACTION:** **DATE:** \_\_\_\_\_ **BY:** \_\_\_\_\_

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**APPENDIX B**  
**BUILDING PROFILE**

## BUILDING PROFILE

### I. GENERAL BUILDING INFORMATION

1. Building name and address: New Executive Office Building 725 17th Street, NW Washington, DC	2. Building Number: DC0105ZZ
3. Building Contact: Ms. K. Bonos	4. Number of stories of building:  Above grade: 10  Below grade: 2
5. Lease information (if applicable):  Lease expiration date: N/A Lessor : N/A	6. Date of previous survey: 1993
7. Previous findings not corrected:  See Paragraph 1.0	8. Floors the Federal Government occupies: All
9. Height of building above the lowest level of fire department access (in feet) a. To highest Federally occupied floor: 120 feet b. To the roof of the building: 140 feet	10. Types of Federal occupancies on each floor a. NFPA101 classifications: Business b. BOCA Use Group: B c. Mixed Use and Occupancy as Per BOCA (313): B / A
11. Types of non-Federal hazardous occupancies on each floor: None	12. Approximate gross area per floor (Federally occupied floors):  37,400 square feet
13. Number of Federal occupants: 2000 Agency(ies) Executive Office of the President, OMB	

<p>14. Construction Type (BOCA Classification): TYPE 2A Based on (a., b., or c. below): c</p> <p>a. Describe floor/ceiling construction: Concrete</p> <p>b. Describe roof construction: Membrane &amp; ballast or steel</p> <p>c. Describe column construction: Steel with spray-on protection</p>	<p>15. Height and area modifications</p> <p>Percentage reduction in area due to height (T 501.4):</p> <p>Percentage increase for open perimeter (502.2):</p> <p>Increase for sprinkler protection (area and height - 502.3):</p> <p>Allowable height and area:</p>
<p>16. Location of significant fire risks that expose Federally occupied floors: Lower level shops</p>	<p>17. Describe fire-rated subdivision of floors: Five fire areas created by the exit stairs.</p>
<p>18. Fire suppression capability (describe as listed below):</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p>a. Sprinklers - location(s): Area wide</p> <p>b. Waterflow alarm(s), type and location: Flow switches on risers</p> <p>c. Control valves, type and typical location: Butterfly on risers.</p> <p>d. Valve supervision, type and typical location: Internal</p> <p>e. Standpipe - riser size, location, and number: 6 / 4 inch. Located in each stairway.</p> <p>f. Location(s) and manufacturer / model of fixed CO<sub>2</sub>, dry chemical and / or halon fire suppression systems: Two Kidde Sentinel HDR 25C dry chemical systems for kitchen hood protection on 2nd floor.</p> <p>g. Fire pump data:</p> <p>Rated capacity (gpm): 1000 gpm</p> <p>Rated net pressure (psi): 80 psi</p> <p>Primary power supply: Electric</p> <p>Secondary power supply: None</p> </div> <div style="width: 48%;"> <p>Fire pump data(continued)</p> <p>Manufacturer: ITT Allis Chalmers</p> <p>Supply static pressure: Pump room locked</p> <p>Discharge static pressure: Pump room locked</p> <p>Separate controller for fire pump and jockey pump? Pump room locked</p> <p>h. Water supply to building: Pump room locked</p> <p>i. Water supply information: N/A</p> <p>Test Date: N/A</p> <p>Hydrant location: N/A</p> <p>Static pressure(psi): N/A</p> <p>Flow (gpm): N/A</p> <p>Residual pressure(psi): N/A</p> <p>Low hydraulic gradient where applicable (ft.): N/A</p> </div> </div>	

<p>19. Computer room fire protection (each location):</p> <p>Location 1: Room 4220</p> <p>a. Describe suppression system(s): On / off wet pipe sprinklers</p> <p>b. Detection system: Smoke detectors on ceiling and below floor</p> <p>Appropriate type detectors for intended use: Yes</p> <p>Type and manufacturer: Ionization</p> <p>Control equipment location: In room</p> <p>Control equipment manufacturer: Firelite</p> <p>Describe connection to building fire alarm system. Wired to main system</p> <p>c. Type of emergency lighting: Wall mounted battery pack</p> <p>d. Emergency power shutdown switches provided: Yes</p> <p>How many and location in rooms: 2 by doors</p> <p>Separate switch for computer power and air conditioning? No</p> <p>e. Fire extinguisher type (s) and number: 12 Water &amp; CO2</p> <p>f. Describe computer room enclosure (fire rating, construction and shielding): 1 hour</p>		<p>Location 2: N/A</p> <p>a. Describe suppression system(s):</p> <p>b. Detection system:</p> <p>Appropriate type detectors for intended use:</p> <p>Type and manufacturer:</p> <p>Control equipment location:</p> <p>Control equipment manufacturer:</p> <p>Describe connection to building fire alarm system.</p> <p>c. Type of emergency lighting:</p> <p>d. Emergency power shutdown switches provided:</p> <p>How many and location in rooms:</p> <p>Separated switch for computer power and air conditioning?</p> <p>e. Fire extinguisher type (s) and number:</p> <p>f. Describe computer room enclosure (fire rating, construction and shielding):</p>
<p>20. Day Care Center:</p> <p>a. Location: None</p> <p>b. Describe exits: N/A</p> <p>c. Describe sprinkler system: N/A</p> <p>d. Fire Alarm/Detection System:</p> <p>Pull station locations: N/A</p> <p>Smoke detector locations: N/A</p> <p>Equipment manufacturers: N/A</p> <p>Control equipment location: N/A</p> <p>Describe connection to building fire alarm system: N/A</p> <p>e. Number of staff: N/A</p> <p>f. Number and age range of students: N/A</p>	<p>21. Smoke detectors (not computer room detectors)</p> <p>a. Location (s): Elevator lobbies and penthouse, Switchgear room</p> <p>b. Appropriate type for intended use: Yes</p> <p>c. Type and manufacturer: Ionization</p> <p>d. Control equipment location: Ground floor</p> <p>e. Control equipment manufacturer: Edwards</p> <p>f. Describe connection to building fire alarm system: Wired to main system</p>	
<p>22. Heat detectors</p> <p>a. Location (s): Elevator penthouse, transformer vaults, carpenter shop</p> <p>b. Appropriate type for intended use: Yes</p> <p>d. Control equipment location: Ground floor</p> <p>e. Control equipment manufacturer: Edwards</p> <p>f. Describe connection to building fire alarm system: Wired to main system</p>	<p>23. Other detectors</p> <p>a. Location (s): Duct detectors</p> <p>b. Appropriate type for intended use: Yes</p> <p>c. Type and manufacturer: AP&amp;C R-UNI-N</p> <p>d. Control equipment location: Ground floor</p> <p>e. Control equipment manufacturer: Edwards</p> <p>f. Describe connection to building fire alarm system: Wired to main system</p>	



<p>24. Communication features:</p> <p>a. Type of fire alarm system - general, pre-signal, coded with limited number of rounds, etc.: Voice</p> <p>b. Central station (company name): GSA RCC and Secret Service</p> <p>c. Describe emergency telephone system: Elevators, elevator lobbies, stairs</p> <p>d. Describe secondary power source: Batteries</p> <p>e. Control panel Information:          Location: Ground floor fire control room          Manufacturer / model: Edwards FAST          Operating <u>voltage</u>: 24v</p> <p>f. Manual station locations: Doors</p> <p>g. Style of alarm initiating circuit wiring: D</p> <p>h. Type of alarm indicating appliances (visual and / or audible) and locations: Speakers and strobes</p> <p>i. Style of alarm indicating circuit wiring: Y</p> <p>j. Notification system: Entire bldg., floor, above and below or other: Floor above and below          Devices that actuate general alarm (list all types): Pulls, flow switches, detectors</p> <p>k. System interfaced with:          Elevators: Yes          Smoke control: Yes - Fan S/D          Electric door locks: No          Other (describe): Door closers</p>	
<p>25. Emergency lighting:</p> <p>a. Type: Wall mounted battery packs</p> <p>b. Locations: Corridors and stairways</p> <p>c. Secondary power source: Batteries</p>	<p>26. Exit signs:</p> <p>a. Locations: At exits and in corridors</p> <p>b. Secondary power source: Batteries</p>
<p>27. Emergency generator: None</p> <p>a. Power source: N/A</p> <p>c. Location: N/A</p> <p>b. Capacity: N/A</p>	
<p>28. Means of egress:</p> <p>a. Number of exits: 4 stairways</p> <p>b. Where do they discharge? 1 direct, three to ground floor</p> <p>c. Exit capacity: 546 - adequate</p> <p>d. Exit remoteness:          Maximum diagonal dimension of typical floor (identify for others if different than typical floors): 358 feet          Exit door separation distance: 265 feet          How is distance measured? Straight line</p> <p>e. Exit access: NR corridor</p> <p>f. Exit enclosure: 2 hour</p> <p>g. Exit discharge protection: 2 hour</p> <p>h. Exit dimensions - width, tread, riser: 41", 11 ", 7.5"</p> <p>i. Handrails: 34 inches above treads - 2" pipe</p> <p>j. Dead ends: None</p> <p>k. Common paths of travel: None in excess of 100 feet.</p>	

29. Elevator features: a. Number of elevators: 6 passenger , 1 freight b. Emergency elevator operation: - Phase I operation (automatic and manual recall)? Yes - Phase II operation (firefighter's service)? Yes - Designated recall level: 1 - Alternate recall level: 2nd floor - What other alarms in building, other than elevator lobby smoke detectors, will recall elevators? N/A c. Certificate date: September 1997 d. Telephone within cab? Yes Who answers telephone? Dial out line	
30. Hazard of exposure buildings: Renwick gallery, Blair house, Jackson Place condos.	31. Occupant emergency plan (OEP): a. Date of last revision / update: 1997 b. Are the persons designated in the plan current and have they had training? Yes c. Does it contain procedures to evacuate handicapped individuals? Yes d. Fire exit drill Date of last exit drill: October 1997 Was drill announced: No Were exiting conditions varied: No
32. Local fire department pre-fire plan: Yes	
33. HVAC system design: a. Source of heat: Central steam b. Source of chilled water: Chillers and tower c. Location of fans: Penthouse d. Presence of fire dampers: Yes e. Presence of duct smoke detectors: Yes f. Return air routing: Plenum g. Supply air routing: Duct h. Smoke control features: None Stair Pressurization: N/A Passive Partitioning: N/A Engineered System: N/A i. Rated cable if used in plenum? N/A	34. Maintenance of fire protection equipment. a. Report the general condition of the equipment as whether maintenance records and frequency conform to appropriate National Fire Protection Association (NFPA) Standards: - Fire extinguishers - Good - Fire alarm - Good - Sprinklers - Good - Emergency Lighting- Good b. Who maintains which types of equipment: - Fire extinguishers - GSA - Fire alarm - GSA - Sprinklers - GSA - Emergency Lighting - GSA
35. Boiler inspection: a. Certificate(s) (who inspected?): N/A b. Date(s): N/A	36. Locations of other special occupancies: a. Laboratories: None b. Printing plants: Basement c. Parking garages: Basement d. Storage areas > 1000 square feet: None e. Telephone frame rooms: None f. Other (describe): Carpenter shop in basement
37. Interior Construction: a. Corridor/Room separation as defined by NFPA 101M: Smoke resistive with closers b. Describe predominant interior wall finish and estimated flame spread rating: Painted drywall; 25 or less c. Describe predominant ceiling finish and estimated flame spread rating: Plaster or suspended ceiling; 25 or less	

**Facility Safety and Health Information****General Safety and Health Documentation****38. Check applicable areas:**

- |                               |     |
|-------------------------------|-----|
| a. Asbestos                   | (x) |
| b. PCBs                       | ( ) |
| c. Confined Spaces            | (x) |
| d. Battery Charging           | (x) |
| e. Laboratories               | ( ) |
| f. X-Ray Equipment            | (x) |
| g. Indoor Firing Ranges       | ( ) |
| h. Significant Hazmat Storage | ( ) |
| i. Photo Processing           | ( ) |
| j. Incinerators               | ( ) |
| k. Printing Plants            | ( ) |
| l. Significant Noise          | (x) |
| m. Other-Specify              | ( ) |

### Details of Special Occupancies

39. Battery charging: There was a small battery bank with eight batteries in the transformer vault.
- a. Adequacy of ventilation: Ventilation is considered adequate
  - b. Eye wash protection: Squeeze bottle eyewashes were provided.
40. Other special occupancies: Confined spaces exist in SB-214: The room was posted identifying five tanks as permit required confined spaces and procedures for entry. No findings were identified.
- a. Laboratories: None
  - b. Printing plants: None
  - c. Parking garages: A parking garage is located on the 1B and 2B levels of the building.
41. Noise and Vibration: Yes
- a. Location(s): Chiller room and carpenter shop.
  - b. Protection provided: The chiller room and carpenter shop were posted as noise hazard areas.
  - c. Standards compliance: There were no violations of standards noted.
42. OSHA standards compliance: Good
43. Motor pool service areas: None
44. Xray equipment and other radiation-producing or storage areas: None - with the exception of X-ray screening of packages by security at the entrance to the building.
45. Indoor target ranges: None
46. Warehouses or areas storing hazardous materials: None
47. Photo processing or graphic arts facilities: None
48. Incinerators (and note compliance per local/state codes and EPA regulations): None
49. Printing plants: None
50. Spray-painting operations: None
51. Posting of hazardous areas requiring PPE; i.e., foot, head, eye, hearing, respirator: None
52. Storage area for firearms, ammunition, explosives: None
53. Communications equipment, roof-mounted antennas: None

### Environmental Management

54. Environmental Pollution Control Equipment: None
  - a. Wastewater Treatment Facilities: None
  - b. Air Emission Control Devices: None
  - c. Incinerators: None
55. Areas of the Building Where Asbestos Containing Materials (ACM) Present: Asbestos is known to exist as a sprayed on fireproofing material on the structural steel and on HTW and condenser water piping in pipe risers throughout the building.
  - a. Sprayed-on or Troweled-on Surfacing Material: Fireproofing on structural steel.
  - b. Thermal System Insulation: Yes - on HTW systems
  - c. Other Types of ACM: None noted or reported.
  - d. If a-c = Yes Comment on Asbestos Management Plan: An asbestos determination has been conducted for this facility. A control plan has been developed and training for managers provided. Ms. Kerry Bonos of the GSA White House Field Office has been designated as the GSA Facilities Asbestos Control Manager. She manages the control plan for the facility plan and provides oversight of abatement projects.
56. Transformer Vaults: Oil filled transformers in the building do not contain PCBs.
  - a. Location: 1B level
  - b. Labeling: Labeled non-PCB
  - c. Diking: Diking is provided
  - d. Decontamination: Not applicable
57. Laboratories and Other Special Occupancies: None
  - a. Location: Not applicable
  - b. Hoods, Vents: Not applicable
  - c. Disposal Practices: Not applicable
58. Storage Areas for Hazardous and Toxic Materials: No environmental issues were presented.
  - a. Location: Not applicable
  - b. Compatible Storage: Not applicable
  - c. Spill Control Dikes: Not applicable
  - d. Response Equipment: Not applicable
59. Hazardous Waste Management Activities: None
  - a. Generation: Not applicable
  - b. Temporary Storage Areas: Not applicable
  - c. Spill Control/Dikes: Not applicable
  - d. Response Equipment: Not applicable
60. Potable Water Treatment Equipment: None
61. Solid Waste Management Facilities: None
62. Petroleum, Oil and Lubricant Storage: None observed or reported.
  - a. Location(s)/Amount: Not applicable
  - b. Spill Control/Dikes: Not applicable
  - c. Response Equipment: Not applicable
  - d. Underground Storage Tanks: Not applicable

**INDOOR AIR QUALITY****63. Indoor Air:**

- a. Heat is obtained from: Steam is provided by the West Heating Plant.
- b. Cooling Air is obtained from: A cooling tower and three 650 ton Trane chillers.
- c. Air is circulated by: The primary system serving the building consisted four large supply and return fans in the penthouse. Supply air is circulated through a network of ducts. Return air is routed through the ceiling plenum.
- d. Location and size of Building Air Intakes: Outside air is admitted through several large air intakes on the penthouse wall.
- e. Potential Contamination Sources of Outside Air: There were no potential sources of outside air contamination observed.
- f. Location of cooling tower: Three new cooling towers are roof mounted inside an enclosure. The towers discharge remotely from the air intakes.
- g. Control of biological agents in cooling tower: The GSA services and maintains the cooling towers. Biocide Betz Entec 442 was being administered to the system via an automatic pump system.
- h. Adequacy of air movement based on observation and CO2 levels: CO2 levels were below the action level of 1,000 ppm in the morning. Air movement is considered adequate.
- i. Local exhaust systems: Roof mounted fans exhaust air from the restrooms and mechanical rooms.
- j. Areas of Complaints: There were no complaints reported.
- k. Activities Generating Contaminants: There were no activities considered to be potential sources of indoor air contamination.
- l. Filter Maintenance: The HVAC system is provided with two inch pleated cartridge filters. The filters were clean at the time of the survey.

**APPENDIX C**  
**FSES ANALYSIS**

## FIRE SAFETY EVALUATION SYSTEM

The Fire Safety Evaluation System (FSES) Analysis presented in this Appendix follows the approach outlined in NFPA 101M, Alternate Approaches to Life Safety. NFPA 101M stipulates that the FSES must take into consideration any deficiencies in systems. If the system does not meet the applicable standards listed in Chapter 8 of 101M, then credit can not be given in the initial evaluation.

The evaluation can be based on the entire building. However, portions of the building may also be evaluated as zones. A zone must be one or more complete fire or smoke zones and must meet other criteria as presented in the methodology. For GSA purposes, a single zone is all that is needed to evaluate all of the Federal occupancy in this building. The area of interest is the tenth floor office area. This will be used as the height of the building in this analysis. The Safety Parameters, justification for their selection and their values as defined in Table 7-1 of NFPA 101M are as follows:

1. Construction - Safety Parameter value = 2

The building is ten stories in height and is Type II (222) as defined by NFPA 220.

2. Segregation of hazards - Safety Parameter value = 0

All hazards are located in the basement.

3. Vertical openings - Safety Parameter value = -2

Open two story atrium.

4. Sprinklers - Safety Parameter value = 10

Area wide sprinkler protection is provided for the building.

5. Fire alarm system - Safety Parameter value = 1

The building has a fire alarm system with FD notification.

6. Smoke detection - Safety Parameter value = 0

There are no smoke detectors that qualify for this credit.

7. Interior finish - Safety Parameter value = 2

The interior finish in the office area is painted drywall.

8. Smoke control - Safety Parameter value = 0

An engineered smoke control system is not provided.

9. Exit access - Safety Parameter value = 0

No dead ends greater than 50 feet. Exit travel is between 100-200 feet.



## 10. Exit system - Safety Parameter value = -2

Multiple remotely located exits are provided. There is a concern with exit discharge

## 11. Corridor/room separation - Safety Parameter value = 1

Smoke resistive with closers.

## 12. Occupant emergency program - Safety Parameter value = 1

An OEP exists for this building. Annual drills are conducted.

## Notes for Table 7-1 Safety Parameters

NV. Where these conditions exist, this FSES does not evaluate overall safety. Other analysis techniques may be applied in accordance with the equivalency concept of Section 1-6 of NFPA 101, *Life Safety Code*.

- A. Use 0 if building is one level.
- B. In any sprinkler protected spaces consider flame spread rating to be 25 or 75 if the interior finish material flame spread does not exceed 75 or 200 respectively.
- C. Increase 200 to 300 if parameter 4 is 10 or more.
- D. Use 0 if parameter 11 is -6.
- E. Rate separation 20 min. (or actual if greater) if parameter 4 is 10 or more. Smoke resisting if parameter is based on unprotected construction.
- F. Use ( ) if separation between rooms also meets criteria.
- G. Use only if all vertical openings have both more than 1 hr enclosure and meet the requirements of 5-1.3 and 26-3.1 or 27-3.1.
- H. Use (20 ft) for new construction and 50 ft for existing buildings.
- J. Use ( ) for single exit in accordance with exceptions to 26-2.4 and 27-2.4.2 of NFPA 101.
- K. Use (3) if parameter 4, Sprinklers, value < 10.
- L. Use ( ) for building which has:
  - (a)  $\geq 2$  stories above level of exit discharge, or
  - (b)  $\geq 100$  person occupant load above or below level of exit discharge, or
  - (c)  $\geq 1000$  total occupant load.
- M. See 7-5.11.1.1 for guidance.
- N. Use ( ) in buildings over 150 ft in height with no formal occupant emergency organization program.
- O. Use ( ) in any building, regardless of height, with a formal occupant emergency organization.

Table 7-1 Safety Parameters

Safety Parameters		Parameter Values								
1. Construction		Noncombustible				Combustible				
	NFPA 220 Bldg. Constr. Types	Type I (443) or (332) Type II (222)	Type II (111)	Type II (000)	Type III (211) (200)	Type IV (2HH)	Type V (111) (000)			
	1 story	0	0	0	0 -1	0	0	0	-1	
	2 stories	2	2	-4	0 -2	0	0	0	-4	
	3 stories	2	2	-6	0 -6	0	0	0	-12	
	4-5 stories but ≤ 75'	2	2	-12	0 -12	0	-3	-12		
	>5 stories but ≤ 75 '	2	2	NV	0 NV	0	-6	NV		
	> 75' but < 150'	2	-1	NV	0 NV	0	-6	NV		
	≤ 150'	2	NV	NV	0 NV	0	-6	NV		
2. Segregation of hazards		Exposed exit system		Segregation from exit routes				None or no deficiencies		
		Double Def.	Single Def.	Double Def.		Single Def.				
		-7	-4	-4		0				
3. Vertical openings		Open (or incomplete enclosure)				Enclosed				
		Connects 5 or more floors	4 flrs.	3 flrs.	2 flrs.	< 30 min.	30 min. to 1 hr.	> 1 hr <sup>G</sup>		
		-10	-7	-4	-2	-1 (0) <sup>A</sup>	0	1		
4. Sprinklers		None	Corridors only	All but corridors and lobbies		Total building				
		0	0	Standard	Fast resp.	Standard	Fast resp.			
				4	6	10	12			
5. Fire alarm system		None		w/o fire department notification		w/ fire department notification				
		0 (-1) <sup>L</sup>		1 (0) <sup>L</sup>		2 (1) <sup>L</sup>				
6. Smoke detection		None		Corridor		Rooms		Total bldg. (zone)		
		0		1		2		4		
7. Interior finish exit routes rooms / suites		Flame spread ratings <sup>B</sup>								
		> 75 to ≤ 200		> 25 to ≤ 75		≤ 25				
		> 75 to ≤ 200	≤ 75	> 75 to ≤ 200	≤ 75	> 25 to ≤ 200	≤ 25			
		-3	-1	0	1	1	2			
8. Smoke control		None		Passive		Active				
		0		3		4 (3) <sup>K</sup>				
9. Exit access		Max. dead ends		No dead end > 50 ft. & travel is:						
		> 75' to ≤ 100'	> 50' (20') <sup>H</sup> ≤ 75'	> 200' <sup>C</sup>	> 100' - 200' <sup>C</sup>	> 50' - 100'	≤ 50'			
		-2 <sup>D</sup>	-1	-1	0	1	3			
10. Exit system		Multiple routes				Smokeproof enclosures		Direct exits		
		Single	Deficient	> 2						
		-6 (0) <sup>J</sup>	-2	0						
11. Corridor/room separation (Compartmentation)		Separation exists and level of protection is:						No separation		
		Incomplete	Smoke resistive <sup>E</sup>		> 20 min. <sup>E</sup>		1 hr. or more <sup>E</sup>			
			w/o door closer	w/ door closer	w/o door closer	w/ door closer	w/ door closer			
			-6 to 0 <sup>M</sup>	0	1 (2) <sup>F</sup>	1	2 (3) <sup>F</sup>			3 (4) <sup>F</sup>
12. Occupant emergency program		Number of fire drills conducted per year								
		0		1 to 2		> 2				
		-2 (-3) <sup>N</sup>		0 (1) <sup>O</sup>		1 (2) <sup>O</sup>				

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**Table 7-2 Individual Safety Evaluation**

Safety Parameter	Fire Control (S <sub>1</sub> )	Egress Provided (S <sub>2</sub> )	General Firesafety Provided (S <sub>3</sub> )
1. Construction	2		2
2. Hazardous Areas	0	0	0
3. Vertical opening	-2/2	-2	-2
4. Sprinklers	10	10/2	10
5. Manual fire alarm systems	1/2	1	1
6. Smoke detection	0/2	0	0
7. Interior finish	2/2		2
8. Smoke control		0/2	0
9. Exit access		0	0
10. Exit system		-2	-2
11. Corridor separation	1/2	1/2	1
12. Occupant Emergency program		1	1
Total	S <sub>1</sub> = 13.0	S <sub>2</sub> = 3.5	S <sub>3</sub> = 13.0

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**Table 7-3 Mandatory Requirements**

Building Height	Control Requirement (S <sub>a</sub> )		Egress Requirement (S <sub>b</sub> )		General Firesafety (S <sub>c</sub> )	
	New	Exist.	New	Exist.	New	Exist.
1 story	0.5	-1.0	1.5	0	2	-1
2 stories	-2.5	-4.0	1.5	0	-1	-4
3 stories	1.5	0	1.5	0	3	0
>3 stories and < 75 ft.	4.0	2.0	2.5	0	6	2
> 75 ft. but < 150 ft.	9.5	7.5	7.5	5	10	6
> 150 ft.	12.5	10.5	7.5	5	13	9

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**Table 7-4 Equivalency Evaluation**

					YES	NO
Control Provided ( $S_1$ )	minus	Required Control ( $S_a$ )	$\geq 0$	$S_1 - S_a =$ $\boxed{13.0} - \boxed{7.5} = \boxed{6.5}$	✓	
Egress Provided ( $S_2$ )	minus	Required Egress ( $S_b$ )	$\geq 0$	$S_2 - S_b =$ $\boxed{3.5} - \boxed{5.0} = \boxed{-1.5}$		✓
General Firesafety ( $S_3$ )	minus	Required General Firesafety ( $S_c$ )	$\geq 0$	$S_3 - S_c =$ $\boxed{13.0} - \boxed{6.0} = \boxed{7.0}$	✓	

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**Table 7-5 Facility Firesafety Requirements Worksheet**

Considerations	Met	Not Met	Not Applic.
A. Building utilities conform to the requirements of Section 7-1 of NFPA 101, <i>Life Safety Code</i> .	✓		
B. The air conditioning, heating, and ventilating systems conform to Section 7-2 of NFPA 101, <i>Life Safety Code</i> .	✓		
C. Elevator installations are made in accordance with the requirements of Section 7-4 of NFPA 101, <i>Life Safety Code</i> .	✓		
D. Rubbish chutes, incinerators, and laundry chutes are installed in accordance with Section 7-5 of NFPA 101, <i>Life Safety Code</i> .			✓
E. Portable fire extinguishers are installed and maintained in accordance with the requirements of 26-3.5/27-3.5 and 7-7.4.1 of NFPA 101, <i>Life Safety Code</i> .	✓		

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**Equivalency Conclusion**

Not all of the checks in Table 7-4 are in the "Yes" column. The level of firesafety is not shown to be equivalent to the life safety requirements prescribed by NFPA 101, *Life Safety Code*. The equivalency covered by this worksheet includes the majority of considerations involved. There are however, a few considerations that are not evaluated by this method. These issues must be considered separately. Some of these additional considerations are covered in Table 7-5. A second FSES analysis is presented below, considering correction of the exit discharge issues.

The Revised Safety Parameters, justification for their selection and their values as defined in Table 7-1 of NFPA 101M are as follows:

1. Construction - Safety Parameter value = 2  
The building is ten stories in height and is Type II (222) as defined by NFPA 220.
2. Segregation of hazards - Safety Parameter value = 0  
All hazards are located in the basement.
3. Vertical openings - Safety Parameter value = -2  
Open two story atrium.
4. Sprinklers - Safety Parameter value = 10  
Area wide sprinkler protection is provided for the building.
5. Fire alarm system - Safety Parameter value = 1  
The building has a fire alarm system with FD notification.
6. Smoke detection - Safety Parameter value = 0  
There are no smoke detectors that qualify for this credit.
7. Interior finish - Safety Parameter value = 2  
The interior finish in the office area is painted drywall.
8. Smoke control - Safety Parameter value = 0  
An engineered smoke control system is not provided.
9. Exit access - Safety Parameter value = 0  
No dead ends greater than 50 feet. Exit travel is between 100-200 feet.
10. Exit system - Safety Parameter value = 0  
Multiple remotely located exits are provided. The exit discharge is assumed corrected.
11. Corridor/room separation - Safety Parameter value = 1  
Smoke resistive with closers.

## 12. Occupant emergency program - Safety Parameter value = 1

An OEP exists for this building. Annual drills are conducted.

## Notes for Table 7-1 Safety Parameters

NV. Where these conditions exist, this FSES does not evaluate overall safety. Other analysis techniques may be applied in accordance with the equivalency concept of Section 1-6 of NFPA 101, *Life Safety Code*.

- A. Use 0 if building is one level.
- B. In any sprinkler protected spaces consider flame spread rating to be 25 or 75 if the interior finish material flame spread does not exceed 75 or 200 respectively.
- C. Increase 200 to 300 if parameter 4 is 10 or more.
- D. Use 0 if parameter 11 is -6.
- E. Rate separation 20 min. (or actual if greater) if parameter 4 is 10 or more. Smoke resisting if parameter is based on unprotected construction.
- F. Use ( ) if separation between rooms also meets criteria.
- G. Use only if all vertical openings have both more than 1 hr enclosure and meet the requirements of 5-1.3 and 26-3.1 or 27-3.1.
- H. Use (20 ft) for new construction and 50 ft for existing buildings.
- J. Use ( ) for single exit in accordance with exceptions to 26-2.4 and 27-2.4.2 of NFPA 101.
- K. Use (3) if parameter 4, Sprinklers, value < 10.
- L. Use ( ) for building which has:
  - (a)  $\geq 2$  stories above level of exit discharge, or
  - (b)  $\geq 100$  person occupant load above or below level of exit discharge, or
  - (c)  $\geq 1000$  total occupant load.
- M. See 7-5.11.1.1 for guidance.
- N. Use ( ) in buildings over 150 ft in height with no formal occupant emergency organization program.
- O. Use ( ) in any building, regardless of height, with a formal occupant emergency organization.

Table 7-1 Revised Safety Parameters

Safety Parameters		Parameter Values								
1. Construction		Noncombustible				Combustible				
	NFPA 220 Bldg. Constr. Types	Type I (443) or (332) Type II (222)	Type II (111)	Type II (000)	Type III (211) (200)	Type IV (2HH)	Type V (111) (000)			
	1 story	0	0	0	0 -1	0	0	0	-1	
	2 stories	2	2	-4	0 -2	0	0	0	-4	
	3 stories	2	2	-6	0 -6	0	0	0	-12	
	4-5 stories but ≤ 75'	2	2	-12	0 -12	0	-3	-12		
	>5 stories but ≤ 75'	2	2	NV	0 NV	0	-6	NV		
	> 75' but < 150'	2	-1	NV	0 NV	0	-6	NV		
	≤ 150'	2	NV	NV	0 NV	0	-6	NV		
2. Segregation of hazards		Exposed exit system		Segregation from exit routes				None or no deficiencies		
		Double Def.	Single Def.	Double Def.		Single Def.				
		-7	-4	-4		0		0		
3. Vertical openings		Open (or incomplete enclosure)				Enclosed				
		Connects 5 or more floors	4 flrs.	3 flrs.	2 flrs.	< 30 min.	30 min. to 1 hr.	> 1 hr <sup>G</sup>		
		-10	-7	-4	-2	-1 (0) <sup>A</sup>	0	1		
4. Sprinklers		None	Corridors only	All but corridors and lobbies		Total building				
		0	0	Standard	Fast resp.	Standard	Fast resp.			
				4	6	10	12			
5. Fire alarm system		None		w/o fire department notification		w/ fire department notification				
		0 (-1) <sup>L</sup>		1 (0) <sup>L</sup>		2 (1) <sup>L</sup>				
6. Smoke detection		None	Corridor		Rooms		Total bldg. (zone)			
		0	1		2		4			
7. Interior finish exit routes rooms / suites		Flame spread ratings <sup>B</sup>								
		> 75 to ≤ 200		> 25 to ≤ 75		≤ 25				
		> 75 to ≤ 200	≤ 75	> 75 to ≤ 200	≤ 75	> 25 to ≤ 200	≤ 25			
		-3	-1	0	1	1	2			
8. Smoke control		None		Passive		Active				
		0		3		4 (3) <sup>K</sup>				
9. Exit access		Max. dead ends		No dead end > 50 ft. & travel is:						
		> 75' to ≤ 100'	> 50' (20') <sup>H</sup> ≤ 75'	> 200' <sup>C</sup>	> 100' - 200' <sup>C</sup>	> 50' - 100'	≤ 50'			
		-2 <sup>D</sup>	-1	-1	0	1	3			
10. Exit system		Multiple routes				Smokeproof enclosures		Direct exits		
		Single	Deficient		> 2					
		-6 (0) <sup>J</sup>	-2		0		3		5	
11. Corridor/room separation (Compartmentation)		Separation exists and level of protection is:						No separation		
		Incomplete	Smoke resistive <sup>E</sup>		> 20 min. <sup>E</sup>		1 hr. or more <sup>E</sup>			
			w/o door closer	w/ door closer	w/o door closer	w/ door closer	w/ door closer			
		-6 to 0 <sup>M</sup>	0	1 (2) <sup>F</sup>	1	2 (3) <sup>F</sup>	3 (4) <sup>F</sup>		0	
12. Occupant emergency program		Number of fire drills conducted per year								
		0		1 to 2		> 2				
		-2 (-3) <sup>N</sup>		0 (1) <sup>O</sup>		1 (2) <sup>O</sup>				

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**Table 7-2 Revised Individual Safety Evaluation**

Safety Parameter	Fire Control (S <sub>1</sub> )	Egress Provided (S <sub>2</sub> )	General Firesafety Provided (S <sub>3</sub> )
1. Construction	2		2
2. Hazardous Areas	0	0	0
3. Vertical opening	-2/2	-2	-2
4. Sprinklers	10	10/2	10
5. Manual fire alarm systems	1/2	1	1
6. Smoke detection	0/2	0	0
7. Interior finish	2/2		2
8. Smoke control		0/2	0
9. Exit access		0	0
10. Exit system		0	0
11. Corridor separation	1/2	1/2	1
12. Occupant Emergency program		1	1
Total	S <sub>1</sub> = 13.0	S <sub>2</sub> = 5.5	S <sub>3</sub> = 15.0

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**Table 7-3 Mandatory Requirements**

Building Height	Control Requirement (S <sub>a</sub> )		Egress Requirement (S <sub>b</sub> )		General Firesafety (S <sub>c</sub> )	
	New	Exist.	New	Exist.	New	Exist.
1 story	0.5	-1.0	1.5	0	2	-1
2 stories	-2.5	-4.0	1.5	0	-1	-4
3 stories	1.5	0	1.5	0	3	0
>3 stories and < 75 ft.	4.0	2.0	2.5	0	6	2
> 75 ft. but < 150 ft.	9.5	7.5	7.5	5	10	6
> 150 ft.	12.5	10.5	7.5	5	13	9

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**Table 7-4 Revised Equivalency Evaluation**

					YES	NO
Control Provided ( $S_1$ )	minus	Required Control ( $S_a$ )	$\geq 0$	$S_1 - S_a = 13.0 - 7.5 = 6.5$	✓	
Egress Provided ( $S_2$ )	minus	Required Egress ( $S_b$ )	$\geq 0$	$S_2 - S_b = 5.5 - 5.0 = 0.5$	✓	
General Firesafety ( $S_3$ )	minus	Required General Firesafety ( $S_c$ )	$\geq 0$	$S_3 - S_c = 15.0 - 6.0 = 9.0$	✓	

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**Table 7-5 Facility Firesafety Requirements Worksheet**

Considerations	Met	Not Met	Not Applic.
A. Building utilities conform to the requirements of Section 7-1 of NFPA 101, <i>Life Safety Code</i> .	✓		
B. The air conditioning, heating, and ventilating systems conform to Section 7-2 of NFPA 101, <i>Life Safety Code</i> .	✓		
C. Elevator installations are made in accordance with the requirements of Section 7-4 of NFPA 101, <i>Life Safety Code</i> .	✓		
D. Rubbish chutes, incinerators, and laundry chutes are installed in accordance with Section 7-5 of NFPA 101, <i>Life Safety Code</i> .			✓
E. Portable fire extinguishers are installed and maintained in accordance with the requirements of 26-3.5/27-3.5 and 7-7.4.1 of NFPA 101, <i>Life Safety Code</i> .	✓		

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**Equivalency Conclusion**

Now all of the checks in Table 7-4 are in the "Yes" column. The level of firesafety is shown to be equivalent to the life safety requirements prescribed by NFPA 101, *Life Safety Code*.

**APPENDIX D**  
**GSA FORM 3559**

REPORT FOR FACILITY SAFETY, HEALTH , OR FIRE PROTECTION SURVEY					PAGE 1	OF	PAGES		
1. REPORT CONTROL NO.		2. DATE OF REPORT		3. BUILDING NAME AND ADDRESS New Executive Office Building 725 17th Street NW, Washington, DC		4. BUILDING NUMBER DC0105ZZ		5. PBS FIELD OFFICE White House PMC	
6. DATE OF SURVEY 4/7/98		<input checked="" type="checkbox"/> SCHEDULED FOLLOW-UP <input type="checkbox"/> UNSCHEDULED		7. SURVEY CONDUCTED BY R. Eberly & G. Christensen Events Analysis, Inc.		8. TRAVEL COST INCURRED		9. TOTAL MANHOURS EXPENDED	
10. DIRECTIVE LEGEND (Reference in Item 14) A. OSHA STANDARD B. NFPA CODE C. ANSI STANDARD D. OSHA DIRECTIVE E. OTHER				11. TYPE OF REPORT (Check appropriate box(es)) <input checked="" type="checkbox"/> (F) FIRE SAFETY/PROTECTION <input checked="" type="checkbox"/> (S) FACILITY SAFETY AND HEALTH <input type="checkbox"/> (O) OSH <input type="checkbox"/> (I) PRELEASE <input type="checkbox"/> (P) PRE-OCCUPANCY <input type="checkbox"/> (M) MISC./OTHER		12. CATEGORY (Reference in Item 16) A. SPRINKLERS B. FIRE ALARMS C. ELEVATORS D. EXITS (NFPA 101) E. STRUCTURAL F. ENVIRONMENTAL G. OSHA H. OTHER			
13. ITEM No.	14. REFERENCED DIRECTIVE	15. FINDINGS AND RECOMMENDATIONS (State finding first, then recommendation and continue alternately)			16. CATEGORY AND OCCUPIABLE AREA AFFECTED	17. RESPONSIBLE FOR ABATEMENT	18. ABATEMENT PLAN DATE	19. CORRECTION DATE	20. COMMENTS (Include cost)
		None							

9-11-93-132

**FACILITY AND FIRE SAFETY SURVEY  
OF  
DC0105ZZ  
NEW EXECUTIVE OFFICE BUILDING  
725 17TH STREET NW  
WASHINGTON, DC**

JUL 22 10 15 AM '93

**Prepared by: Events Analysis, Inc.**

**Item 04 Of Task Order No. P-11-93-DC-9063**

**FSES ANALYSIS RESULTS**

	Fire Control	Egress	General Firesafety
Provided	4.0	-2.5	2.0
Required	7.5	5.0	6.0
Equivalency	-3.5 (N)	-7.5 (N)	-4.0 (N)

**NEW FINDINGS BY RAC LEVEL**

RAC 1	0
RAC 2	0
RAC 3	6
RAC 4/5	11

**SURVEY DATE: APRIL 26-27, 1993**

**FINAL REPORT**

**FACILITY AND FIRE SAFETY SURVEY  
OF DC0105ZZ  
NEW EXECUTIVE OFFICE BUILDING  
725 17TH STREET NW  
WASHINGTON, DC**

## **1.0 INTRODUCTION**

Under Contract No. GS-11P92MJD0061 with the General Services Administration's (GSA) Safety and Environmental Management Division, Events Analysis, Inc., (EVA) is tasked to provide Facility and Fire Safety and Occupational Health and Safety Surveys of Federally occupied buildings in the National Capital Region.

This report details the results of the Facility and Fire Safety Survey of the New Executive Office Building (DC0105ZZ), that was conducted as Item No. 04 of Task Order No. P-11-93-DC-9063. The survey was conducted on April 26-27, 1993, by Mr. R. Eberly, Fire Protection Engineer, and Mr. Greg Christensen, Safety Engineer.

A listing of all minor facility safety and health, fire safety, environmental management, and indoor air quality findings identified during the survey is provided in Appendix A. A building profile is presented in Appendix B. Appendix C presents an FSES Analysis for the building, and GSA Form 3559 is presented in Appendix D.

## **1.A OPEN FINDINGS**

The following items were carried as open in the SAFE System Report furnished to the surveyors. The recommended status changes, as a result of this survey, are as displayed in the following table:

<b>Control Number</b>	<b>Description</b>	<b>Current Status</b>
G-11-82-003-001	Below grade areas not sprinklered	Project in progress
G-11-82-003-002	Highrise not sprinklered	Project in progress
G-11-82-003-003	Ground floor exit discharge paths not protected	Not corrected-security has changed see report
G-11-86-170-004	Elevators provided with automatic recall upon elevator lobby smoke detectors but not manual alarms or sprinkler systems	Project in progress
G-11-86-170-005	Fire Alarm system is antiquated; pre-signal, some parts nonreplaceable, others custom made & upgrading not possible	Not corrected - a new system is being installed

G-11-86-170-017	First floor executive office library not sprinklered	Project in progress
G-11-90-277-001	A fixed ladder in the penthouse HVAC shaft is 50 ft long with no fall protection cage	Not corrected
G-11-91-189-006	Battery charging is conducted in the main vault but containment and exhaust ventilation not provided	Ventilation provided- no sill
G-11-91-189-010	Transformer vault ceiling treated with fireproofing material which is coming off and contains ASB	Corrected

## **2.0 SURVEY METHODOLOGY**

### **2.1 Opening Conference**

The EVA survey representatives arrived on-site at the NEOB in Washington, DC. and subsequently began the survey. A opening conference was held with Mr. John Marsh, the building engineer. The representatives reviewed the purpose of the visit and the procedures to be used during the conduct of the survey effort.

### **2.2 Applicable Standards**

During the conduct of the inspection, the following standards and guidelines were used to evaluate the fire safety conditions at the aforementioned facility.

- National Fire Protection Association (NFPA) Codes.
- Code of Federal Regulations, 29CFR1910 - General Industry Standard
- BOCA National Building Code.
- PBS/PQ-100 Facilities Standards for the Public Buildings Service - Chapter Seven, "Fire Protection Engineering"

### **2.3 Inspection Procedures**

The actual walk-through survey consisted of observing the condition of facilities, inspecting the condition of equipment, the storage of materials, and any operations in progress that may affect the physical facility or GSA owned or leased equipment, plus the layout of the equipment/materials in the facility as they relate to fire safety. In addition, a review of the building's fire safety features, namely fire detection/alarm systems, fire suppression systems (both fixed and portable), fire divisions and doors, emergency lighting and exit signs, and means of egress were conducted. Where potential hazards were identified, these were brought to the attention of the appropriate facility personnel and discussions of possible remedies were held. The survey team was escorted through the building by Mr. Marsh.

## **2.4 Description of Facility**

### **2.4.1 New Executive Office Building**

The New Executive Office Building (NEOB) was constructed in 1966 and is a ten story office building with two below grade levels. The building is formed in the shape of a capital H, with the west leg of the building, which fronts on 17th street, being approximately 80 feet longer than the east leg. The four exit stairs are located on the four ends of the building. The elevators and building services shafts are located in the core of the building, which can be envisioned as the cross bar of the H. The two basement levels are used as a parking garage and as mechanical spaces and workshops. The approximate gross floor area is 37,400 square ft. per floor. The building is occupied by the Executive Office of the President, and the Office of Management and Budget. The building is arranged with a central corridor running along each leg of the building. The type of occupied space includes mainly enclosed offices, a print shop on level 2B, a computer room on the fourth floor, a large conference room on the second floor, a loading dock and paper shredding area on the ground floor, workshops on the 1B level, an exercise facility with sauna and Jacuzzi on the second floor, and a library on the ground floor. The Secret Service occupies a portion of the second floor and the ground floor. The survey team was not permitted access to these areas. The GSA escort did not have a key and stated that he is not allowed in these areas - estimated to be 10,000 sq/ft. The second floor of the building has a balcony area that is about 15 feet wide. For security reasons, the access doors to the balcony have been locked and alarmed. An open two story atrium connects the first and second floors of the building on the east and west sides. Automatic sprinklers are currently installed in the parking garage and the fourth floor computer room. A fire alarm system is installed throughout the building. The construction of the building was observed to be of reinforced concrete floor/ceiling assemblies. Some areas have a plaster ceiling in addition to the suspended ceiling. The structural frame is made of steel that has been sprayed with an asbestos containing insulation. The exterior of the building is brick and glass. The 9th and 10th floors of the building have bay windows. This results in a construction classification of Type II (222) as defined by NFPA 220, and Type 2A construction as defined by the BOCA National Building Code. The occupancy in the building is classified as a Business Occupancy by NFPA 101 (Life Safety Code) criteria, Use Group B by BOCA, and as a Group II Hazard by GSA Standards.

## **3.0 RESULTS**

Highlights of the facility and fire safety survey are contained in this section. Section 3.1 highlights the facility safety and health findings, while Section 3.2 highlights the fire safety findings. Many of the findings associated with these categories are described here as well as in Appendix A.

### **3.1 Findings - Facility Safety Survey**

There were three moderate (RAC 3) and six minor (RAC 4) facility safety and health findings identified as a result of this survey.

#### **3.1.1 Walking/Working Surfaces**

There were two minor (RAC 4) findings pertaining to the building's walking/working surfaces identified as a result of this survey.

#### **3.1.2 Electrical Systems**

This building is provided with a standard three wire grounded electrical system. The system was spot checked and the continuity confirmed. There were two findings identified as a result of this survey.

The electrical outlet by the sink in room 6101 was of the Non-GFCI variety.

High voltage electrical panels were not secured in the corridor 2B level near the elevator banks and in the 1B garage level near the valet station.

### 3.1.3 Machine Guarding

There was one building wide finding identified concerning the guarding of the building's fixed machinery as a result of this survey.

The building supply, return and exhaust fans were not guarded adequately. Pulleys, belts and rotating shafts were only partially guarded. Specifically, pulleys and belts were guarded on one side. The rotating fans and shafts on the fan side of the air handling units were only guarded on the lower side of the opening.

### 3.1.4 Emergency First Aid Equipment

There was one finding pertaining to the need for or condition of the building's fixed emergency first aid equipment identified as a result of this survey.

A squeeze bottle eyewash was provided for the switchgear battery bank area, 1B level. The GSA does not recognize this type of eyewash as meeting the criteria for eyewash fountains

### 3.1.5 Material Handling & Storage

There were no findings pertaining to the building's materials handling and storage equipment identified as a result of this survey.

## 3.2 Findings - Fire Safety Survey

There were eight fire safety findings identified as a result of this survey. Five of the findings are considered minor findings and are reported as such in Appendix A. The most significant finding is the current arrangement of the exits. Three of the four exit stairways discharge to the first floor lobby. Compounding this situation is the single means of egress from the first floor lobby. The Jackson Place exit doors have been locked for security reasons. The building occupants coming down the three exit stairs all must pass through the 17th street lobby to leave the building. The exit path is further hindered by turnstiles and revolving doors at this location. The FSES Analysis shows that the building does not provide a level of safety equivalent to that required by the Life Safety Code. Building wide sprinklers are needed to attain this level of safety.

### 3.2.1 Means of Egress

The building is currently served by four exit stairways, accessed from the main corridor. Stairways # 1 and # 2 serve the west leg of the building, and stairways # 3 and # 4 serve the east leg. Three of the stairways discharge to the first floor of the building, and one discharges directly to the outside. Stairway #1 discharges to the first floor lobby behind the guard desk. A short section of protected corridor connects the stair discharge to the main lobby. Stairway # 2 discharges inside the Secret Service area on the north side of the building, however, occupants of the upper floors would use the direct discharge to the ramp area outside the building by the loading dock. Stairway #4 discharges to a protected corridor behind the library on the first floor. The



protected corridor leads to the Jackson Place lobby. Stairway # 3 discharges to the first floor in the elevator lobby. Rated fire doors controlled by magnetic holders connected to the fire alarm system separate both ends of the elevator lobby from the Jackson Place lobby and the 17th street lobby. This also separates the exit discharge doors of stairway # 3 from stairway # 4, and stairway # 1 from the other stairways. After reaching the ground floor, the occupants would leave the building by travelling to the 17th street lobby. The Jackson Place lobby doors have been locked for security reasons, preventing their use as exits. To leave the building on the 17th street side, the occupants would have to pass through three 16-1/2 inch wide turnstiles or a 40 inch wide gate, all of which are installed in a partition that is 36 inches high. These four barriers must be manually released by the guard desk. The lobby access to 17th street is then through one set of 72 inch wide double doors or through two revolving doors. The total exit capacity for the four exit stairways is adequate for 546 occupants. Based on the Life Safety Code, the calculated occupant load for the building is 374 people, which is based on an allowance of 100 square feet per person. Therefore, the exit capacity for the building is adequate. The remote exits are separated by a straight line distance of approximately 265 feet. The diagonal of the building is approximately 358 feet. Therefore, the remoteness of the exits is adequate by NFPA 101 criteria, as they are separated by a distance which is equal to at least one-half the length of the maximum diagonal dimension of the unsprinklered building. Several concerns were identified with the exit system.

This building is currently not sprinkler protected and three of the four exits discharge to the first floor. A maximum of 50% of the required exits are permitted to discharge to the first floor in a sprinkler protected building. It is our understanding that a project has been initiated to retrofit sprinklers in this building. If the sprinklers are in place, the exit discharge concern can be corrected by constructing a protected exit passageway from stairway # 4 to the exterior of the building. This would satisfy the NFPA 101 criteria, however, GSA fire protection staff had analyzed this issue and has determined that it cannot be done without completely renovating the building's first floor, HVAC system, etc. It has been determined that the lobby doors controlled by magnetic releases connected to the fire alarm system provide equivalent protection.

Conference rooms located on the 9th and 10th floor (room # 10103 and 9104) have seating capacity for approximately 65 persons, making them Class C areas of Assembly. The three doors into the rooms are presently arranged to swing into the rooms. For an Assembly occupancy of greater than 50 persons, NFPA 101 requires the doors to swing in the direction of exit travel. The door swing should therefore be reversed.

The exit access aisles in the office areas by rooms 9001 and 6001 are obstructed by furniture to 23-33 inches. The furniture should be removed to allow a clear aisle width of 44 inches in the clear.

The doors to stairways # 1 and # 3 on the 10th floor do not properly close and latch when opened. Both of these doors should be adjusted and lubricated as necessary.

### 3.2.2 Sprinkler and Standpipe System

Sprinkler protection is currently installed in the parking garage and in the fourth floor computer room. The system is supplied from a six inch feed from the city water mains. The sprinkler control valves are located in the parking garage on the 1B level. The sprinkler systems' flow and tamper switches are tied into the building's fire alarm system. A four inch Star dry pipe valve is used for the loading dock sprinklers. Four standpipes are installed in the building, one in each stairway. The standpipes are framed into the exit enclosure walls, but appear to be six inch diameter up to the fourth floor, and four inch diameter above.

It is our understanding that a project has been initiated to retrofit sprinklers throughout the building. This is to include modification or replacement of the existing systems. At the time of the survey, partial installation had been begun on wet pipe systems on the 8th and 10th floors as well

as on a deluge system for the roof top cooling tower. A 1000 gpm electric motor driven fire pump has been located on the 1B level. The pump installation is not yet completed. One finding was identified in this area. Parking garage level 2B has a number of HVAC ducts located at the ceiling. The ducts are more than 48 inches in width. A lower tier of sprinkler heads should be installed beneath the ducts.

### 3.2.3 Fire Separations

The fire separations of concern in this building are the enclosure of the stairs and the separation of the office space from the remainder of the building. The stairways are constructed of concrete blocks and have self closing Class B fire doors. Fresh air for the building is supplied by vertical shafts from the roof. These shafts are located in the core of the building behind the elevator shafts. The horizontal ducts opening into the shafts are protected by fire dampers. Mechanical equipment is located in the basement or on the penthouse level. The corridor walls in the building are concrete block that extend from slab to slab. Office doors are self closing wood or metal, and in some areas glass doors were noted. There was one finding in this area.

The first and second floors are connected by an open atrium. This area is not sprinkler protected, and the atrium is not separated from the rest of the building by one hour barriers. The spaces adjacent to the atrium are separated by glass walls and doors. The atrium should be sprinkler protected to correct this concern.

### 3.2.4 Fire Extinguishers

Six 2-1/2 gallon pressurized water fire extinguishers are located in the corridor on each floor. 15 lb CO<sub>2</sub> extinguishers are also provided in the fourth floor computer room. The units were last serviced in April of 1993 or December of 1992. The types and quantities of extinguishers satisfy the NFPA spacing rules for portable extinguishers. There were no findings in this area.

### 3.2.5 Emergency Lighting and Power

The PEPCO power supply to the building is a dual feed system from separate sources. In the event power is lost from both feeders, additional emergency lighting is provided in the building by battery pack lighting units. There were no findings in this area.

### 3.2.6 Exit Signs

Internally illuminated LED type exit signs are installed in the building. The signs are located appropriately to show the direction of travel to the exits. The exit signs have back up power provided by batteries. There were several findings in this area.

The Jackson Place lobby is no longer used as an exit for security reasons. The doors are still marked with exit signs. Either the locked doors should be arranged with electric locks that are deactivated by the fire alarm system, or the exit signs should be removed.

The 17th street side of the building is approximately 280 feet long. In some areas, the office space on this side of the building is open nearly the entire length of the corridor. No exit signs are located in the office space. Because of the length of the aisles in the offices on this side of the building, exit signs should be provided following the guidance of NFPA 101 which specifies that all areas should be within 100 feet from the nearest visible sign. The floors where this condition was observed include the 10th, 6th, and 5th floors.

### 3.2.7 Alarm System

The main fire alarm system provided for this building is manufactured by Autocall. The ACT 2 control panel is located in the first floor guard room. The system monitors manual pull stations, smoke detectors, heat detectors, duct detectors, and tamper and waterflow switches. A general evacuation alarm system is utilized for the building. The system is provided with a battery back-up. Central station service is provided by the GSA Control Center. In addition to the main system, there are several local systems, some of which are not connected to the main panel. A Firelite Sensiscan 1000 control panel is also mounted in the guard station. This panel is connected to the elevator recall smoke detectors and the fourth floor computer room local Firelite panel. This panel is not monitored by the central station. The fourth floor computer room also has a Notifier local panel that is connected to the Autocall main panel. A Pyrotronics System 3 control panel is being installed in the guard station for the cooling tower deluge system. This panel is currently not in service. A Pyrotronics System 3 local system is installed in the second floor exercise facility. Another Pyrotronics system is provided for the smoke detection system in the paper shredder room off the main loading dock. It is our understanding that the entire building alarm system is to be replaced during the sprinkler retrofit project. There are several findings in this area.

No visible alarm devices are provided. Per GSA criteria, approved strobe lights or other visible indicating appliances should be installed to supplement the existing alarm horns. The new fire alarm system being installed will include visible alarm devices.

The evacuation time for the building is approximately 12 minutes. The building evacuation signal is designed for a general evacuation. Per GSA criteria, if the evacuation time exceeds eight minutes, the fire alarm system should be arranged to provide selective evacuation.

### 3.2.8 Witnessing and Documentation of Testing

The fire alarm system is tested and maintained by the White House fire alarm shop. Routine testing of the system is performed on a quarterly basis. The last full scale test of the system was conducted on April 7. There were no findings in this area.

### 3.2.9 Fire Safety Summary

The New Executive Office building appears suitable for continued occupancy by GSA, if the area wide sprinkler system is completed and the recommended exit modifications are implemented. None of the findings presented appear to increase the possibility of a fire occurring in the building. The condition of the building is also reflected in the FSES analysis.

## 3.3 Findings - Environmental Management

There were no environmental findings identified during this survey.

### 3.3.1 Air Pollution Control

The facility does not have either an incinerator nor any fume hoods. No other operations were reported or noted that could serve as major air pollutant emission sources.

### 3.3.2 Asbestos Abatement

According to the building engineer, asbestos is present in the occupied spaces in this facility. An asbestos determination has been conducted for this facility. Asbestos is known to exist as a sprayed on fireproofing material on the structural steel and on HTW and condenser water piping in pipe risers throughout the building. Abatement of some ACM has been conducted. ACM was

recently removed from steam lines in SB 214. The material sprayed on the structural steel has been encapsulated. Documentation concerning the control plan and training for managers was not available for review. The engineer stated that an O & M plan is in effect to prevent maintenance personnel from disturbing ACM.

### 3.3.3 Water Pollution Control

The facility is connected to a municipal waste water treatment system and does not discharge any materials directly to streams or storm water runoff systems. No other operations were reported or noted that could serve as major water pollutant sources.

### 3.3.4 Nonhazardous Waste Management

This location has a recycling program in effect for high grade waste paper, newspaper and aluminum cans. Routine office trash is removed daily and staged in exterior dumpsters which are emptied at least once a day.

### 3.3.5 Hazardous Waste Management

The tenant agencies do not generate hazardous waste at this facility.

### 3.3.6 Underground storage tanks

There were no underground storage tanks associated with this facility.

### 3.3.7 PCB Management

No equipment containing PCBs were reported or noted during this survey. The transformers in the building are reportedly oil-filled and were labeled Non-PCB.

### 3.3.8 Drinking Water

According to the building engineer, filters have been installed on the water system entering the building and on the water fountain system. Tests have been conducted concerning lead levels in the drinking water. Results of the tests were not available for review by Events Analysis Inc.

### 3.3.9 Pesticide Control

According to the building engineer, the GSA stores, handles and and applies pesticides at this location. The applicator is certified. The survey team was not able to access the storage room which was constructed from plywood in the garage. Since plywood is a combustible material and pesticides should be stored in approved cabinets a finding was issued.

### 3.3.10 Special Occupancies

This building is used for office work. In addition, a carpenter shop is located adjacent to the loading dock area.

### 3.3.11 Environmental Management Summary

In summary, the environmental practices in this building are in compliance with GSA criteria with minor exceptions.. The building and/or its operation does not pose any major environmental concerns.

### 3.4 Findings - Indoor Air Quality

There were no findings regarding indoor air quality at this location.

#### 3.4.1 Ventilation

Heating is supplied in the form of steam from the west heating plant. Cooling is provided by cooling towers with chillers located on the roof. The ventilation system is a zoned system supplied by 4 supply and return fans located in the penthouse. In addition, 10 exhaust fans are used to exhaust waste air from bathrooms and cafeteria areas. The fresh air intakes are located on the penthouse east and west walls. It was noted a cosmetic barrier surround the cooling towers and penthouse to hide this equipment from view. It was noted the plume from a cooling tower was located 14 feet from the west fresh air intake. It appeared to be drawn toward and into this intake. This intake could be further isolated from this possible source of air contamination by installing a duct to locate the intake to a more remote area.

#### 3.4.2 Complaints

The Building Manager reported no active IAQ complaints.

#### 3.4.3 Potential Contamination Sources

There was one potential sources of indoor air contamination identified at this facility. The near proximity of the cooling tower to the west fresh air intake is considered a potential source of air contamination.

#### 3.4.4 Maintenance

A planned maintenance schedule has been implemented for this facility. According to the engineer, the filters are normally replaced on a semi-annual basis. However, due to heavy construction in the area, filters have been changed more frequently (approximately every three months). A visual inspection indicated a recent replacement.

**APPENDIX A**  
**MINOR FINDINGS**

DRAFT \_\_\_\_\_ FINAL   X   Sheet#   1   of   4  MINOR SURVEY FINDINGS REPORTTO:   White House Field Office   DATE:   4-27-93  FROM:   Events Analysis, Inc.  BUILDING NAME/LOCATION:   NEOB  PRINTED NAME OF RECIPIENT:   Ms. Lucille Price  

SIGNATURE OF

RECIPIENT: \_\_\_\_\_

The following list of items has been identified for correction as a result of a Safety and Environmental Management Survey conducted on the date(s) indicated above. Please indicate the corrective action taken and provide your name in the space provided. Please forward the completed form to the Safety and Environmental Management Division (WPX). Please complete form within 60 calendar days of receipt of final.

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**FINDING #:**   1  

Exit access aisles in rms. 9001 and 6001 are obstructed by furniture. Remove the furniture.

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**CORRECTIVE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_  
**BY:** \_\_\_\_\_

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**FINDING #:**   2  

Stair doors #1 and # 3 on the 10th floor do not close and latch properly when released. Repair the latching mechanism.

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**CORRECTIVE ACTION:** \_\_\_\_\_ **DATE:** \_\_\_\_\_  
**BY:** \_\_\_\_\_

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Sheet #\_\_2\_\_ of \_\_4\_\_

BUILDING NO:\_\_\_\_\_DC0105ZZ\_\_\_\_\_

BUILDING LOCATION:\_\_\_\_\_NEOB\_\_\_\_\_

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**FINDING #:**\_\_\_3\_\_\_\_\_

Sprinkler discharge on the 2B level of the garage is blocked by HVAC ducts that are 48 inches or more in width. Consider installing additional heads beneath the HVAC ducts.

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**CORRECTIVE ACTION:****DATE:**\_\_\_\_\_**BY:**\_\_\_\_\_

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**FINDING #:**\_\_\_4\_\_\_\_\_

The electric outlet in Room 6101 is of the non-GFCI type. Install a GFCI receptacle.

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**CORRECTIVE ACTION:****DATE:**\_\_\_\_\_**BY:**\_\_\_\_\_

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**FINDING #:**\_\_\_5\_\_\_\_\_

Exit signs are not installed in the long office aisles on the 17th street side of the building's 10th, 6th, and 5th floors. Install additional exit signs in these areas.

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**CORRECTIVE ACTION:****DATE:**\_\_\_\_\_**BY:**\_\_\_\_\_

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**FINDING #:**\_\_\_6\_\_\_\_\_

A squeeze bottle eyewash has been provided for the battery bank charging area. Install a plumbed eyewash.

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**CORRECTIVE ACTION:****DATE:**\_\_\_\_\_**BY:**\_\_\_\_\_



Sheet #\_\_3\_\_ of \_\_4\_\_

BUILDING NO: \_\_\_\_\_DC0105ZZ\_\_\_\_\_

BUILDING LOCATION: \_\_\_\_\_NEOB\_\_\_\_\_

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FINDING #: \_\_7\_\_\_\_

The doors from conference rooms 10103 and 9104 swing against travel. The rooms have a capacity greater than 50. Rehang doors to swing with direction of egress travel.

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CORRECTIVE ACTION:

DATE: \_\_\_\_\_

BY: \_\_\_\_\_

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FINDING #: \_\_8\_\_\_\_

A telephone cord was in the aisle in room 7103. Re-route cord.

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CORRECTIVE ACTION:

DATE: \_\_\_\_\_

BY: \_\_\_\_\_

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FINDING #: \_\_9\_\_\_\_

Pesticides are stored in a plywood cabinet in the garage. Store these materials in an approved cabinet.

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CORRECTIVE ACTION:

DATE: \_\_\_\_\_

BY: \_\_\_\_\_

Sheet #\_\_4\_\_ of\_4\_

BUILDING NO:\_\_\_\_\_DC0105ZZ\_\_\_\_\_

BUILDING LOCATION:\_\_\_\_\_NEOB\_\_\_\_\_

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FINDING #:\_\_10\_\_

The carpet in room 10025 was rippled. Restretch or replace carpet.

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CORRECTIVE ACTION:

DATE:\_\_\_\_\_

BY:\_\_\_\_\_

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FINDING #:\_\_11\_\_

The chiller room and building Supply fan doors were not posted for hearing protection. Post warning signs and provide ear defenders.

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CORRECTIVE ACTION:

DATE:\_\_\_\_\_

BY:\_\_\_\_\_

**APPENDIX B**  
**BUILDING PROFILE**

## CONSTRUCTION AND SPACE LAYOUT

- **Number of stories of building (above and below grade).** The highest floor of Government occupancy is considered the height of the building. The building is a ten story building with two below grade levels.
- **Specific floors the Federal Government occupies.** Include the specific Government agency names. OMB and Executive Office of the President
- **Types of occupancies on each floor the Federal Government occupies.** Business as defined by NFPA 101
- **Types of occupancies on each floor the Federal Government does not occupy.** Business
- **Approximate gross square footage per floor.** 37,400
- **Number of Federal occupants in the building.** 2,000
- **Description of the building construction:** Type II (222)
  - **Type of floor construction:** Reinforced concrete over protected steel frame.
  - **Type of roof construction:** Membrane over steel

## FIRE PROTECTION

- (a) **Description and location of hazardous/significant fuel load areas:** Mechanical spaces, transformer vaults, and workshops on the 1B and 2B levels
- (b) **Description and location of vertical openings:** Stairways and HVAC shafts. Also a 2 story atrium.
- (c) **Description and location of automatic sprinkler systems:** Sprinklers are currently installed in the parking garage and 4th floor computer room.
- (1) **Waterflow and tamper alarm.** Waterflow on the sprinkler systems is detected by flow and/or pressure switches which are tied into the fire alarm panel; control valves are externally supervised open with tamper switches which are also tied into the fire alarm panel.
- (2) **Fire pump - size, type of power, rating.** ITT Allis Chalmers, electric motor driven, 1000 gpm @ 80 psi. is being installed for the new sprinkler system.
- (d) **Description and location of standpipes:** Six inch standpipes in each stairway.
- (e) **Description and location of fire extinguishers:** 6- 2-1/2 gallon pressurized water units in each corridor. Also 15 lb CO2 units in the computer room.
- (f) **Description and location of fire alarm system:** The main fire alarm system provided for this building is manufactured by Autocall. The ACT 2 control panel is located in the first floor guard room. The system monitors manual pull stations, smoke detectors, heat detectors, duct detectors, and tamper and waterflow switches. A general evacuation alarm system is utilized for

the building. The system is provided with a battery back-up. Central station service is provided by the GSA Control Center. In addition to the main system, there are several local systems, some of which are not connected to the main panel.

- (1) **Connection to central station or FD.** GSA Control Center
- (2) **Audibility problems.** None reported
- (3) **Emergency telephone system.** Elevators
- (4) **Secondary power source.** Batteries.

(g) **Description and location of smoke detection system:** Smoke detectors are provided in the elevator lobbies and in the transformer vaults, the gym, and the carpenter shop.

(h) **Description and location of interior finish classifications:** The interior finish is painted gypsum wall board.

- (1) **Flame spread.** The flame spread is 25 or less.
- (2) **Smoke Development.** The smoke development is 450 or less.

(i) **Description of the building's engineered smoke control system:** None

(j) **Description and location of the exit access system:** Concrete block corridors with self closing doors.

- (1) **Travel distances.** 150 feet or less.
- (2) **Dead ends.** No dead ends in excess of 50 feet were noted during the survey.
- (3) **Common paths of travel.** None in excess of 75 feet.

(k) **Description and location of the exit system:** Four Protected stairways.

- (1) **Number of exits.** 4
- (2) **Where do the exits discharge?** three discharge to the first floor, one discharges directly to the outside
- (3) **Exit capacity.** 546
- (4) **Exit separation and building diagonal.** The exits are separated by a straight line distance of approximately 265 ft.; the building diagonal is approximately 358 ft.
- (5) **Exit enclosure.** 2 hour concrete block stairs
- (6) **Exit discharge protection.** 2 hour
- (7) **Exit dimensions - width, slope.** 41" width, 10" tread, 7" riser.
- (8) **Handrails.** Acceptable

(9) Indicate if exit capacity for each stairwell meets or exceeds the calculated exiting requirements for each floor of the building. The exits are adequate for the calculated occupant load.

(l) Description on the quality of separation between office spaces and corridors: The corridor walls are slab to slab concrete block. Doors are self closing wood, metal or glass.

(m) Description of the building's Occupant Emergency Plan (OEP):

(1) Date of most current OEP. 1991- Some changes are in process.

(2) Number of fire or training drills. None recently

(3) Are the persons designated in the OEP current? Yes- some updates are in process due to the transition.

(4) Have persons designated in the OEP been trained? Yes

(5) Describe the procedures to evacuate handicapped individuals. Designated individuals are assigned.

(6) Describe the procedures to evacuate occupants after hours. None

(n) Description and location of other fire suppression systems in the building. Restaurant kitchen system

(o) Description and location of heat detectors and other types of fire detectors: Air Products & Controls Model RW-UNI-N duct detectors are located on the supply and return fans.

(p) Description and location of the emergency lighting system: Emergency lighting is provided throughout by battery pack units.

(1) Secondary source of power. Batteries

(q) Description and location of exit signs: Exit signs are located in the main corridors and at the exits.

(1) Secondary source of power. Batteries

(2) Visibility. Fair to poor

(r) Description and location of the elevator system:

(1) Number of elevators - passenger and freight. 6 passenger, 1 freight

(2) Elevator capture (manual). Yes

(3) Automatic recall. Yes

(4) Certificate date. Feb., 1993

(5) Telephone within cab. Yes - connects to an outside line.

(s) **Description of the hazard of exposure buildings.** The building is adjacent to the Blair House, the Renwick Gallery, and the Jackson Place townhouses. A significant fire in any of these structures could impact the NEOB

**(t) Local fire department pre-fire planning:**

(1) **Is the fire department allowed regular access to develop and evaluate pre-fire plans?** Yes

(2) **Approximate date of last fire department visit for the purpose of pre-fire planning.** 1992

(u) **Description of the building's HVAC system:** Heat is by central steam from the west heating plant. Cooling is from chillers located in the basement. Four vertical shafts supply HVAC to each floor from four large air handlers located in the penthouse.

(1) **Presence of fire dampers.** Yes

(2) **Presence of duct smoke detectors.** Yes

(3) **Fan shut-down features.** Yes

(4) **Smoke control features.** None

(v) **Maintenance of fire protection equipment.** Report the general condition of the equipment and whether maintenance records and frequency conform to appropriate National Fire Protection Association (NFPA) Codes and GSA Handbook, Buildings Maintenance Management (PBS P 5850.1B). In addition, evaluate the preventive maintenance program based on the operational test results. All of the equipment is scheduled to be replaced. The existing equipment appears to be maintained in accordance with the recommended frequencies.

(w) **Results of operational tests of fire protection and smoke detection equipment.** A test of the building's fire alarm systems was not performed as part of this survey.

## **FACILITY SAFETY AND HEALTH**

**(a) Ventilation:**

(1) **Adequacy of air movement:** Good - There were no areas of stale air noted or reported.

(2) **Local exhaust systems:** Local exhaust is provided for the battery charging areas in the 1B switchgear room. . Ventilation is considered adequate.

(3) **Control of biological agents:** None

**(b) Battery charging:**

(1) **Adequacy of ventilation:** Ventilation is considered adequate.

(2) **Eye wash protection:** A squeeze bottle eyewash system was provided.

**(c) Laboratories and other special occupancies:**

(d) **Noise and vibration:** There were three potential sources of noise or vibration in excess of 85 dBa identified. The carpenters shop, chiller room (not in operation at the time of the survey) and main supply fans.

(e) **OSHA standards compliance:** Good - violations of OSHA standards were noted.

(f) **Motor pool service areas:** None

(g) **X-ray equipment and other radiation producing or storage areas:** None

(h) **Indoor target ranges:** None

(i) **Warehouses (storing hazardous materials):** None

(j) **Photo processing or graphic arts facilities:** None

(k) **Incinerators:** None

(l) **Printing plants:** None

(m) **Spray painting operations:** None

(n) **Posting of hazardous areas requiring personal protective equipment (foot, head, eye, ear, respirator, etc.):** The battery charging area was posted for eye protection. The carpenters shop, chiller room and doors to main supply fans should be posted for hearing protection.

(o) **As determined by the regional S&EM Branch Chief, any areas in addition to the above where there is increased risk of exposure resulting from the processes performed, including handling, storage, or processing of toxic or potentially toxic substances, storage potentially exceeding floor load limitations, etc.**

No special survey items were requested.

## **ENVIRONMENTAL MANAGEMENT.**

(a) **Environmental pollution control equipment:** None noted or reported.

(b) **Asbestos containing materials:**

(1) **Are locations noted in field office files.** To be determined.

(2) **Are specific types of ACM identified.** To be determined.

(3) **Are written field office plans on field and in accordance with the GSA handbook.** No

(c) **Transformer vaults:** Yes

(1) **Location.** 2B level

(2) **Labeling.** Labeled Non-PCB



(3) **Diking.** Yes

(4) **Decontamination.** Not applicable

(d) **Laboratories and other special occupancies:** None

(e) **Storage areas for hazardous and toxic materials:** None

(f) **Hazardous waste management activities:** None

(g) **Potable water treatment facilities, include location:** None

(h) **Solid waste management facilities, include location:** None

(i) **Petroleum, oil and lubricant storage:** None

(j) **Indoor air:**

(1) **Location of building air intakes:** The fresh air intakes are located on the penthouse East and west walls. It was noted a cosmetic barrier surround the cooling towers and penthouse to hide this equipment from view. It was noted the plume from the cooling tower was located 14 feet from the west fresh air intake. It appeared to be drawn toward and into this intake. The cosmetic barrier may also contribute to capture of the plume by the intake. This intake could be further isolated from this possible source of air contamination by installation of a duct to locate the intake to a more remote area.

(2) **Ventilation:** Heating is supplied in the form of steam from the west heating plant. Cooling is provided by cooling towers with chillers located on the roof. The ventilation system is a zoned system supplied by four supply and return fans located in the penthouse. In addition, ten exhaust fans are used to exhaust waste air from bathrooms and cafeteria areas.

(3) **Areas of complaints:** None noted or reported at the time of the survey.

(4) **Activities generating contaminants:** The cooling tower near the west fresh air intake is considered a potential source of air contamination.

(5) **Cooling water towers:** Cooling towers are located on the roof. Biocides are administered manually at present. According to the engineer, an automatic feed system is slated for installation.

(k) **HVAC Equipment:** Temperature and humidity influence the perception of comfort and/or in-door air quality (IAQ) complaints. The American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) in their standard 55-1981, Thermal Environmental Conditions for Human Occupancy recommends temperature and relative humidity ranges in accordance with the following:

RH%	Temp F (Winter)	Temp F (Summer)
30	68.5 - 76.0	74.0 - 80.0
40	68.5 - 75.5	73.5 - 79.5
50	68.5 - 74.5	73.0 - 79.0
60	68.0 - 74.0	72.5 - 78.0

Additionally, ASHRAE has developed a comfort zone chart that shows a "comfort zone" between 73 and 77 F and 20 to 60% relative humidity. Relative humidity levels less than 20% usually are associated with increased discomfort and drying of the mucous membranes. Temperature and humidity levels recorded during the survey were 75 F and 21% relative humidity.

Carbon dioxide concentrations were also measured during this survey. Carbon dioxide in and of itself is not normally a potential pollutant as it becomes hazardous only at levels above 100,000 ppm and its permissible exposure limit (PEL) is the 5,000 ppm. However, CO<sub>2</sub> serves as a useful indicator of ventilation efficiency. Normal ambient levels of CO<sub>2</sub> are approximately 300 ppm. Therefore, any readings above this level should be considered elevated. Both the GSA and ASHRAE use 1000 ppm as their action level, indicating poor air exchanges. In such cases, the elevated CO<sub>2</sub> levels serve as an indication that contaminants could be elevated as well. The highest CO<sub>2</sub> readings recorded during this survey were 300 ppm.

Carbon monoxide generated from incomplete combustion from gas heating systems and/or from automobile exhausts may also present an IAQ problem. The current PEL for CO is 35 ppm (TWA). However, levels as low as 10 ppm can result in noticeable physiological effects. The National Ambient Air Quality Standard is even less at 9 ppm. Good work practices dictate that CO levels over 5 ppm should be regarded as elevated. CO levels recorded during the survey were 0 ppm

**(l) Laboratory Hoods:** None

**(m) Eye Wash Stations:** Plumbed-in place eyewash fountains were provided for the chiller room and corridor outside the fire pump room. These systems functioned properly when tested.

**(n) Noise Suppression Equipment/Enclosures:** None

**(o) Radiation Barriers and Shielding:** None

**(p) Measurements.**

#### **Instrumentation**

Carbon dioxide concentrations were determined using Drager detector tubes. Results are determined by the reading of a color change produced by the reaction of the substance to be measured with reagents contained in the tube. Sampling was accomplished utilizing the Drager hand pump. The pump was leak tested before and after the survey.

- Light levels were measured with a Digital Illuminometer 93-1065F
- Sound Levels were measured with a Sound Level Meter 33-2050
- Temperature and humidity readings were taken with a Thermohygrometer HI-8564

**MEASUREMENTS RESULTS****Date: April 27, 1993**

<b>Location</b>	<b>Time</b>	<b>Temp (F)</b>	<b>RH%</b>	<b>CO2 (PPM)</b>	<b>LIGHT (F/CAN)</b>
Suite 10025	1200	75	21	300	101
Suite 10236	1215	73	22		
Suite 9235	1235	74	22		
Suite 9001	1245	74	21		
Suite 8013	1255	74	23		
<b>Location</b>	<b>Time</b>	<b>Temp (F)</b>	<b>RH%</b>	<b>CO2 (PPM)</b>	<b>LIGHT (F/CAN)</b>
Suite 8202	1300	76	22	300	67
Suite 8234	1310	75	22		
Suite 7001	1315	75	22		
Suite 7236	1325	75	22		
Suite 6001	1335	75	22		
Suite 6236	1350	75	22		
Suite 5236	1400	75	22		
Suite 5001	1410	75	21		
Suite 3236	1420	75	21		
Suite 3001	1430	75	21		
Computer Rm 4th Flr	1440	75	24	300	72
SE Conf Rm 2nd Flr	1450	75	24		
Room 2200	1455	75	23		
Room G202	1515	75	24		

**(q) Pollution Control Equipment (Water/Air):** None**(r) Transformer Vault Ventilation/Dikes:** Dikes are provided for the transformers.**(s) Hazardous Material Storage Areas:** None**(t) Potable Water Treatment Equipment:** None**(u) Storage Tank Diking/Leak Detection:** None**(v) Ventilation Equipment.****(1) Areas of Complaints.** There were no complaints reported.

**APPENDIX C**  
**FSES ANALYSIS**

## FIRE SAFETY EVALUATION SYSTEM

The Fire Safety Evaluation System (FSES) Analysis presented in this Appendix follows the approach outlined in NFPA 101M, Alternative Approaches to Life Safety. NFPA 101M stipulates that the FSES must take into consideration any deficiencies in systems. If the system does not meet the applicable standards listed in Chapter 8 of NFPA 101M, then credit can not be given in the initial evaluation.

The evaluation can be based on the entire building. However, portions of the building may also be evaluated as zones. A zone must be one or more complete fire or smoke zones and must meet other criteria as presented in the methodology. For GSA purposes, a single zone is all that is needed to evaluate all of the Federal occupancy in this building. For this analysis, the tenth floor of the building was evaluated, as it is the highest floor of government occupancy. The Safety Parameters, justification for their selection, and their values as defined in Table 7-1 of NFPA 101M are as follows:

1. Construction - Safety Parameter Value = 2

The building is of Type II (222) construction and is ten stories in height.

2. Segregation of Hazards - Safety Parameter Value = 0

No hazards were noted.

3. Vertical Openings - Safety Parameter Value = 0

None noted.

4. Sprinklers - Safety Parameter Value = 0

Sprinklers are not provided throughout the building.

5. Fire Alarm System - Safety Parameter Value = 1

A fire alarm system with fire department notification is provided in this building.

6. Smoke Detection - Safety Parameter Value = 0

Smoke detectors are not provided.

7. Interior Finish - Safety Parameter Value = 2

Flame spread rating is considered to be less than or equal to 25 in exit routes and offices.

8. Smoke Control - Safety Parameter Value = 0

An engineered smoke control system is not provided.

9. Exit Access - Safety Parameter Value = 0

There are no dead ends greater than 50 ft. and travel distance to an exit is 100-200 ft.

10. Exit System - Safety Parameter Value = -2

The building has multiple exit routes, however, there is a problem with exit discharge.

11. Corridor/Room Separation - Safety Parameter Value = 1

Smoke resistive separation with door closers is credited.

12. Occupant Emergency Program - Safety Parameter Value = -2

No drills have recently been conducted.

Notes for Table 7-1 Safety Parameters:

- NV. Where these conditions exist, this FSES does not evaluate overall safety. Other analysis techniques may be applied in accordance with the equivalency concept of Section 1-6 of NFPA 101, *Life Safety Code*.
- A. Use 0 if building is one level.
  - B. In any sprinkler protected spaces consider flame spread rating to be 25 or 75 if the interior finish material flame spread does not exceed 75 or 200 respectively.
  - C. Increase 200 to 300 if parameter 4 is 10 or more.
  - D. Use 0 if parameter 11 is -6.
  - E. Rate separation 20 min. (or actual if greater) if parameter 4 is 10 or more. Smoke resisting if parameter is based on unprotected construction.
  - F. Use ( ) if separation between rooms also meets criteria.
  - G. Use only if all vertical openings have both more than 1 hr enclosure and meet the requirements of 5-1.3 and 26-3.1 or 27-3.1.
  - H. Use (20 ft) for new construction and 50 ft for existing buildings.
  - J. Use ( ) for single exit in accordance with exceptions to 26-2.4 and 27-2.4.2 of NFPA 101.
  - K. Use (3) if parameter 4, Sprinklers, value < 10.
  - L. Use ( ) for building which has:
    - (a)  $\geq 2$  stories above level of exit discharge, or
    - (b)  $\geq 100$  person occupant load above or below level of exit discharge, or
    - (c)  $\geq 1000$  total occupant load.
  - M. See 7-5.11.1.1 for guidance.
  - N. Use ( ) in buildings over 150 ft in height with no formal occupant emergency organization program.
  - O. Use ( ) in any building, regardless of height, with a formal occupant emergency organization.

Table 7-1 Safety Parameters

Safety Parameters		Parameter Values							
1. Construction		Noncombustible				Combustible			
	NFPA 220 Bldg. Constr. Types	Type I (443) or (332) Type II (222)	Type II (111)	Type II (000)	Type III (211) (200)		Type IV (2HH)	Type V (111) (000)	
1 story		0	0	0	0	-1	0	0	-1
2 stories		2	2	-4	0	-2	0	0	-4
3 stories		2	2	-6	0	-6	0	0	-12
4-5 stories but ≤ 75'		2	2	-12	0	-12	0	-3	-12
>5 stories but ≤ 75'		2	2	NV	0	NV	0	-6	NV
> 75' but < 150'		2	-1	NV	0	NV	0	-6	NV
≤ 150'		2	NV	NV	0	NV	0	-6	NV
2. Segregation of hazards		Exposed exit system			Segregation from exit routes			None or no deficiencies	
		Double Def.		Single Def.	Double Def.		Single Def.		
		-7		-4	-4		0		
3. Vertical openings		Open (or incomplete enclosure)				Enclosed			
		Connects 5 or more floors	4 flrs.	3 flrs.	2 flrs.	< 30 min.	30 min. to 1 hr.	> 1 hr <sup>G</sup>	
		-10	-7	-4	-2	-1 (0) <sup>A</sup>	0	1	
4. Sprinklers		None	Corridors only	All but corridors and lobbies		Total building			
		0	0	Standard	Fast resp.	Standard	Fast resp.		
				4	6	10	12		
5. Fire alarm system		None		w/o fire department notification		w/ fire department notification			
		0 (-1) <sup>L</sup>		1 (0) <sup>L</sup>		2 (1) <sup>L</sup>			
6. Smoke detection		None		Corridor		Rooms		Total bldg. (zone)	
		0		1		2		4	
7. Interior finish exit routes rooms / suites		Flame spread ratings <sup>B</sup>							
		> 75 to ≤ 200		> 25 to ≤ 75		≤ 25			
		> 75 to ≤ 200	≤ 75	> 75 to ≤ 200	≤ 75	> 25 to ≤ 200	≤ 25		
		-3	-1	0	1	1	2		
8. Smoke control		None		Passive		Active			
		∅		3		4 (3) <sup>K</sup>			
9. Exit access		Max. dead ends		No dead end > 50 ft. & travel is:					
		> 75' to ≤ 100'	> 50' (20') <sup>H</sup> ≤ 75'	> 200' <sup>C</sup>	> 100' - 200' <sup>C</sup>	> 50' - 100'	≤ 50'		
		-2 <sup>D</sup>	-1	-1	0	1	3		
10. Exit system			Multiple routes			Smokeproof enclosures		Direct exits	
		Single	Deficient	≥ 2					
				-6 (0) <sup>J</sup>	-2	0		3	5
11. Corridor/room separation (Compartmentation)		Separation exists and level of protection is:							No separation
		Incomplete	Smoke resistive <sup>E</sup>		> 20 min. <sup>E</sup>		1 hr. or more <sup>E</sup>		
			w/o door closer	w/ door closer	w/o door closer	w/ door closer	w/ door closer		
		-6 to 0 <sup>M</sup>	0	1 (2) <sup>F</sup>	1	2 (3) <sup>F</sup>	3 (4) <sup>F</sup>	0	
12. Occupant emergency program		Number of fire drills conducted per year							
		0		1 to 2		> 2			
		-2 (-3) <sup>N</sup>		0 (1) <sup>O</sup>		1 (2) <sup>O</sup>			

**Table 7-2 Individual Safety Evaluation**

Safety Parameter	Fire Control ( $S_1$ )	Egress Provided ( $S_2$ )	General Firesafety Provided ( $S_3$ )
1. Construction	2		2
2. Hazardous Areas	0	0	0
3. Vertical Openings	0/2	0	0
4. Sprinklers	0	0/2	0
5. Fire Alarm System	1/2	1	1
6. Smoke Detection	0/2	0	0
7. Interior Finish	2/2		2
8. Smoke Control		0/2	0
9. Exit Access		0	0
10. Exit System		-2	-2
11. Corridor/Room Separation	1/2	1/2	1
12. Occupant Emergency Program		-2	-2
Total	$S_1 = 4.0$	$S_2 = -2.5$	$S_3 = 2.0$

1992 edition

**Table 7-3 Mandatory Requirements**

Building Height	Control Requirement ( $S_a$ )		Egress Requirement ( $S_b$ )		General Firesafety ( $S_c$ )	
	New	Exist.	New	Exist.	New	Exist.
1 story	0.5	-1.0	1.5	0.0	2.0	-1.0
2 stories	-2.5	-4.0	1.5	0.0	-1.0	-4.0
3 stories	1.5	0.0	1.5	0.0	3.0	0.0
>3 stories and < 75 ft.	4.0	2.0	2.5	0.0	6.0	2.0
> 75 ft. but < 150 ft.	9.5	7.5	7.5	5.0	10.0	6.0
≥ 150 ft.	12.5	10.5	7.5	5.0	13.0	9.0

1992 edition



**Table 7-4 Equivalency Evaluation**

					YES	NO
Control Provided ( $S_1$ )	minus	Required Control ( $S_a$ )	$\geq$	0	$\frac{S_1}{4.0} - \frac{S_a}{7.5} = \frac{-3.5}{-3.5}$	✓
Egress Provided ( $S_2$ )	minus	Required Egress ( $S_b$ )	$\geq$	0	$\frac{S_2}{-2.5} - \frac{S_b}{5.0} = \frac{-7.5}{-7.5}$	✓
General Firesafety ( $S_3$ )	minus	Required General Firesafety ( $S_c$ )	$\geq$	0	$\frac{S_3}{2.0} - \frac{S_c}{6.0} = \frac{-4.0}{-4.0}$	✓

1992 edition

**Table 7-5 Facility Firesafety Requirements Worksheet**

Considerations		Met	Not Met	Not Applic.
A.	Building utilities conform to the requirements of Section 7-1 of NFPA 101, <i>Life Safety Code</i> .	✓		
B.	The air conditioning, heating, and ventilating systems conform to Section 7-2 of NFPA 101, <i>Life Safety Code</i> .	✓		
C.	Elevator installations are made in accordance with the requirements of Section 7-4 of NFPA 101, <i>Life Safety Code</i> .	✓		
D.	Rubbish chutes, incinerators, and laundry chutes are installed in accordance with Section 7-5 of NFPA 101, <i>Life Safety Code</i> .			✓
E.	Portable fire extinguishers are installed and maintained in accordance with the requirements of 26-3.5/27-3.5 and 7-7.4.1 of NFPA 101, <i>Life Safety Code</i> .	✓		

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**Equivalency Conclusion**

Not all of the checks in Table 7-4 are in the "YES" column. The level of firesafety is not equivalent to the life safety requirements prescribed by NFPA 101, *Life Safety Code*. The issues covered in Table 7-5 must be considered separately. In order for this building to be acceptable, area wide sprinklers and a protected exit discharge corridor are needed.

**APPENDIX D**  
**GSA FORM 3559**

REPORT FOR FACILITY SAFETY, HEALTH , OR FIRE PROTECTION SURVEY							PAGE 1 OF	PAGES	
1. REPORT CONTROL NO.		2. DATE OF REPORT		3. BUILDING NAME AND ADDRESS New Executive Office Building 725 17th Street NW DC		4. BUILDING NUMBER DC0105ZZ		5. PBS FIELD OFFICE White House	
6. DATE OF SURVEY 4/26-27/93		<input checked="" type="checkbox"/> SCHEDULED FOLLOW-UP <input type="checkbox"/> UNSCHEDULED		7. SURVEY CONDUCTED BY G Christensen & R Eberly Events Analysis, Inc.		8. TRAVEL COST INCURRED		9. TOTAL MANHOURS EXPENDED	
10. DIRECTIVE LEGEND (Reference in Item (14)) A. OSHA STANDARD B. NFPA CODE C. ANSI STANDARD D. OSHA DIRECTIVE E. OTHER				11. TYPE OF REPORT (Check appropriate box(es)) <input checked="" type="checkbox"/> (F) FIRE SAFETY/PROTECTION <input checked="" type="checkbox"/> (S) FACILITY SAFETY AND HEALTH <input type="checkbox"/> (O) OSH <input type="checkbox"/> (I) PRELEASE <input type="checkbox"/> (P) PRE-OCCUPANCY <input type="checkbox"/> (M) MISC. OTHER			12) CATEGORY (Reference in Item 16) A. SPRINKLERS B. FIRE ALARMS C. ELEVATORS D. EXITS (NFPA 101) E. STRUCTURAL F. ENVIRONMENTAL G. OSHA H. OTHER		
13. ITEM NO.	14. REFERENCED DIRECTIVE	15. FINDINGS AND RECOMMENDATIONS (State finding first, then recommendation and continue alternately)			16. CATEGORY AND OCCUPIABLE AREA AFFECTED	17. RESPONSIBLE FOR ABATEMENT	18. ABATEMENT PLAN DATE	19. CORRECTION DATE	20. COMMENTS (Include cost)
001	29 CFR191 303(b)	High Voltage electrical panels were not secured near Valet station and 2B level near elevators. URAC 3-IIC  Secure panels and limit access to authorized persons			R	BM AGENCY			\$200 L
002	29 CFR191 219(a)	Supply, return and exhaust fans not guarded adequately URAC 3-IIC  Modify guard to completely enclose rotating parts.			R	BM AGENCY			\$3000 L
003	ASHRAE62 1989	The plume from the tower was not isolated from intake. URAC 3-IIC  Install duct and relocate intake to remote area.			M	BM AGENCY			\$500 L
004	NFPA101 Paragraph 5	75% of the exits discharge to the first floor. URAC 3-IIC  Construct a protected exit discharge passageway from stair # 4 to the exterior or consider existing system equivalant			D	REA AGENCY			\$12000 B
005	NFPA101 Paragraph6-	The atrium connects two floors with no fire separation between the atrium and the rest of the floor. URAC 3-IIC  Separate the atrium from the rest of the building by one hour rated barriers or install sprinklers.			D	REA AGENCY			\$10000 L
006	NFPA101 P5-5	Jackson Place lobby doors are locked, but still marked as exits. URAC 3-IIC  Remove the exit signs or provide means to unlock doors such that they are suitable as exits.			D	BM AGENCY			\$500 B

URAC = UNCONTROLLED RISK CRAC = WITH CONTROL IN PLACE

DATE : 08/17/1993  
TIME : 16:18:43

SAFETY & ENVIRONMENTAL MANAGEMENT SYSTEM  
SURVEY DETAIL BY CONTROL NUMBER

PAGE : 1  
ID : SF/R22

PARAMETERS : REGION NUMBER \* 11 FISCAL YEAR RANGE \* 93 SERIAL NUMBER \* 132 DETAILS/STEPS \* 8

CONTROL NO: G-11-93-132  
SURVEY TYPE: S & EM  
SURVEY DATE: 04/27/1993  
SURVEY CLASS: SCHEDULED  
REPORT DATE: 08/17/1993

BUILDING NO: DCO1052Z BUILDING NAME: NEW EXECUTIVE OFFICE  
BRC: P2 ADDRESS: 725 17TH STREET N W  
FIELD OFFICE: 2021 WASHINGTON D C, DC  
CONDUCTED BY: EVA

TRAVEL COST:  
TOTAL HRS:  
20006 TRAVEL CODE:  
DATE ENTERED: 08/17/1993  
LAST MODIFIED: 08/17/1993

COND NUM/ TYPE	B-L/ RAC	SEV./ PROB	RESP OFF.	AREA	DESIGN REFERENCE	CATEGORY/ STATUS	ORIGINAL PLANNED	CURRENT PLANNED/ ACTUAL	AWARD PLANNED/ ACTUAL	COST ESTIMATE/ ACTUAL	PCN/ WORK ITEM	REVISION DATES
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001 OTH	L 3	II C	BM			GEN BLDG SAFTY OPEN	11/17/1993	11/17/1993		200		
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CONDITION DESCRIPTION: HIGH VOLTAGE ELECTRICAL PANELS WERE NOT SECURED NEAR VALET STATION AND 2B LEVE  
L NEAR ELEVATORS.

RECOMMENDED ACTIONS: SECURE PANELS AND LIMIT ACCESS TO AUTHORIZED PERSONS.  
COMMENTS: 29CFR1910 303(B)

002 OTH	L 3	II C	BM			GEN BLDG SAFTY OPEN	11/17/1993	11/17/1993		3000		
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CONDITION DESCRIPTION: SUPPLY, RETURN AND EXHAUST FANS NOT GUARDED ADEQUATELY.  
RECOMMENDED ACTIONS: MODIFY GUARD TO COMPLETELY ENCLOSE ROTATING PARTS.  
COMMENTS: 29CFR1910 219(A)

003 OTH	L 3	II C	BM			IND AIR QUAL OPEN	11/17/1993	11/17/1993		500		
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CONDITION DESCRIPTION: THE PLUME FROM THE TOWER WAS NOT ISOLATED FROM INTAKE.  
RECOMMENDED ACTIONS: INSTALL DUCT AND RELOCATE INTAKE TO REMOTE AREA.  
COMMENTS: ASHRAE62 1989

004 OTH	B 3	II C	R&A			MEANS OF EGRES OPEN	11/17/1993	11/17/1993		12000		
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CONDITION DESCRIPTION: 75% OF THE EXITS DISCHARGE TO THE FIRST FLOOR.  
RECOMMENDED ACTIONS: CONSTRUCT A PROTECTED EXIT DISCHARGE PASSAGEWAY FROM STAIR #4 TO THE EXTERIOR  
OR CONSIDER EXISTING SYSTEM EQUIVILANT.  
COMMENTS: NFPA101-PARAGRAPH 5

005 OTH	L 3	II C	R&A			MEANS OF EGRES REVISED	11/17/1993	11/17/1993		10000		08/17/1993
------------	--------	---------	-----	--	--	---------------------------	------------	------------	--	-------	--	------------

CONDITION DESCRIPTION: THE ATRIUM CONNECTS TWO FLOORS WITH NO FIRE SEPARATION BETWEEN THE ATRIUM AND  
THE REST OF THE FLOOR.  
RECOMMENDED ACTIONS: SEPARATE THE ATRIUM FROM THE REST OF THE BUILDING BY ONE HOUR RATED BARRIERS  
OR INSTALL SPRINKLERS.  
COMMENTS: NFPA101 - PARAGRAPH 6

006 OTH	B 3	II C	BM			MEANS OF EGRES OPEN	11/17/1993	11/17/1993		500		
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DATE : 08/17/1993  
TIME : 16:18:43

SAFETY & ENVIRONMENTAL MANAGEMENT SYSTEM  
SURVEY DETAIL BY CONTROL NUMBER

PAGE : 2  
ID : SF/R22

PARAMETERS : REGION NUMBER \* 11 FISCAL YEAR RANGE \* 93 SERIAL NUMBER \* 132 DETAILS/STEPS \* B

CONTROL NO: G-11-93-132 CONTINUED

COND NUM/ TYPE	B-L/ RAC	SEV./ PROB	RESP OFF.	DESIGN AREA	REFERENCE	CATEGORY/ STATUS	ORIGINAL PLANNED	CURRENT PLANNED/ ACTUAL	AWARD PLANNED/ ACTUAL	COST ESTIMATE/ ACTUAL	PCN/ WORK ITEM	REVISION DATES
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CONDITION DESCRIPTION: JACKSON PLACE LOBBY DOORS ARE LOCKED, BUT STILL MARKED AS EXITS.

RECOMMENDED ACTIONS: REMOVE THE EXIT SIGNS OR PROVIDE MEANS TO UNLOCK DOORS SUCH THAT THEY ARE SUIT  
ABLE AS EXITS.

COMMENTS: NFPA101 -PARAGRAPH 5-5

\*\*\*\*\* END OF REPORT \*\*\*\*\* BATCH CONTROL 00008927

JUN 30 1999

MEMORANDUM FOR RON DICKEY  
WHITE HOUSE PROJECTS OFFICE

FROM: SUSAN HARRINGTON   
FIRE PROTECTION ENGINEER  
FIRE PROTECTION ENGINEERING SECTION (WPMOX)

SUBJECT: NEW EXECUTIVE OFFICE BUILDING  
ELEVATOR UPGRADE  
FIRE ALARM PUNCHLIST

The purpose of this memorandum is to close-out the elevator upgrade project for elevators 1-6, 7, and 8. These elevators were tested by Mr. Joe Dafin of Klinker & Associates, Inc. on 4/19/99 and 5/8/99. Mr. Ray Granados of the White House Fire Alarm Shop also performed acceptance testing in June 1999 and verified items #11, #22, A, B, C, and E from Mr. Dafin's punchlist dated 5/13/99. The only remaining items from Mr. Dafin's punchlist are indicated below. These items can be verified by you and closed out by you. They are as follows:

1. LSSI needs to provide an up-to-date paper copy of the current system program.
2. The contractor needs to label the shunt trip relay breaker enclosures and the recall relay enclosures in accordance with paragraph 2.4 of Section 16726.
3. The contractor needs to provide a copy of the sprinkler system hydrostatic testing and flushing certificates in accordance with NFPA 13 requirements.
4. The contractor needs to label the elevator power feeds on the circuit breaker panel serving elevators 1, 2, 3, and 7.

If you have any questions on the above information, please contact me at (202) 708-5253.

Sus. Harrington  
WPMOX  
General Services Administration  
7<sup>th</sup> and D Streets, SW  
Washington, DC 20407  
Room 2080

## facsimile transmittal

**To:** Ron Dickey

**Fax:** 202-565-0046

**From:** Susan Harrington

**Date:** 06/30/99

**Re:** NEOB Elevators

**Pages:** 2

**CC:**

☐ Urgent

☐ For Review

☐ Please Comment

☐ Please Reply

☐ Please Recycle

Ron:

Let me know if you have any questions. Thanks.

CONFIDENTIAL

GSA/HR/WPX

(AUTO)

## THE FOLLOWING FILE(S) ERASED

FILE	FILE TYPE	OPTION	TEL NO.	PAGE	RESULT
069	MEMORY TX		95650046	02/02	OK

## ERRORS

1) HANG UP OR LINE FAIL    2) BUSY    3) NO ANSWER    4) NO FACSIMILE CONNECTION







May 13, 1999

Ms. Normajean P. Eleazer  
Safety and Environmental Management Branch  
Room 2080  
General Services Administration  
7th and D Streets, SW  
Washington, D.C. 20407

Re: New Executive Office Building, 725 17<sup>th</sup> Street NW,  
Washington, D.C., Design/Build Vertical Transportation  
Improvements - GSA Acceptance Testing

Dear Ms. Eleazer:

We have performed a recent site inspection and we have witnessed the acceptance testing of the elevator/fire alarm systems modifications at the subject building. The initial acceptance testing occurred on April 19<sup>th</sup>, and the follow-up acceptance testing occurred on May 8<sup>th</sup> of this year. This report follows the same format as our April 23<sup>rd</sup> initial acceptance testing report.

The smoke detectors, heat detectors, sprinkler system tamper and flow switches serving elevators #1-8 were tested. We have witnessed automatic recall and power shunt trip features for all elevators #1-8. The work performed follows the "scope of work" requirements written by Susan Harrington of GSA/NCR/WPMOX.

SYSTEM DESCRIPTION:

The elevator firesafety features are controlled by the building fire alarm system. Elevators #1-6 are passenger elevators serving the entire building. Elevator #7 is the main freight elevator for the building, although it is used for passenger purposes. Elevators 1-6, and #7 share an elevator machine room (EMR) in the penthouse. The landings and the hoistways are separate for elevator #7. Elevator #8 is a two stop hydraulic elevator. The EMR for elevator #8 is located on the B1 level.

Field devices include: addressable monitor modules and control modules, rate compensating heat detectors, photoelectric smoke detectors, vane type waterflow switches on wet sprinkler systems,

and tamper switches on control valves.

The alarm initiating devices include: smoke detectors at each lobby, smoke detectors at the top of the hoistways and in the EMR, heat detectors at the top of the hoistway and in the EMR for elevator #8, and sprinkler water flow switches on the penthouse floor (serving the top of the hoistway and EMR 1-7), and 2<sup>nd</sup> floor (serving the top of elevator #8 hoistway), and B1 level (serving the elevator #8 pit and EMR sprinklers). There are no elevator #8, pit heat detectors, and none are required by GSA.

The automatic recall relays and shunt trip relays are located in the affected EMRs within three feet of the elevator controllers and main circuit breakers respectively. 120 VAC power for the shunt trip breakers are fed from the nearby EMR emergency power panel.

The system is currently in operation. The primary recall level is the first floor (elevators #1-7), and the alternate level is the B1 level (elevators #1-7). The primary recall level for elevator #8 is the Service Level, with the alternate level being the 2<sup>nd</sup> floor.

Our original fire protection acceptance testing report dated April 23, 1999, has 21 recommendations. The **STATUS** of each previous recommendation is listed below. Only items 2, 11, 16, 20, and 22 are still considered open. Item #22 is the only new recommendation.

RECOMMENDATIONS (4/23/99):

1. Before any re-testing of the fire alarm system, provide an up-to-the minute accurate hard copy of the fire alarm system program, which is to be loaded into the building fire alarm system. Also, provide a disk copy to be kept inside the FACP enclosure, and dated as such. (GSA/AHJ requirement and drawing 9-FA-02, note #8)  
**STATUS: LSSI provided current paper copy of the fire alarm program. The will not provide a back-up disk.**
2. Label the shunt trip relay breaker enclosures and the recall relay enclosures in accordance with paragraph 2.4 of section 16726.  
**STATUS: Not done.**
3. Properly install the new tamper switch (0818) on the new OS&Y control valve, located above the 2<sup>nd</sup> floor ceiling, serving the top of the elevator #8 hoistway sprinkler

branch-line. The new control valve leaks slightly when exercised, and no notch was provided on the OS&Y valve.  
**STATUS: Completed.**

4. Provide Listed mounting plates for the two new rate compensating heat detectors installed on 4/19/99, serving the elevator #8. Currently, they are hanging by their conductors. (16726, par. 2.2)  
**STATUS: Completed.**
5. Modify the fire alarm system program such that EMR #8 smoke detector 0306, B1, zone 2, activates the primary recall relay for elevator #8. (NFPA 72, par. 3-8.15.4)  
**STATUS: Completed.**
6. The fire alarm system contractor needs to ensure that all fire alarm initiating devices, when activated, indicate the floor, zone, and type of device, on the graphic annunciator, FACP, and on the VDU and printer. Devices which serve special areas need to be so noted (ie., top of Shaft (TOS), or elevator pit). This requirement is consistent with the operation of the existing EST fire alarm system, and GSA fire alarm system specifications. (16726, par. 1.4)  
  
 Devices which need to be re-tested include: 1892 (no zone number on graphic), 1709 (no zone number on graphic), 1726 (no zone number on graphic), 1870 (no zone number on graphic), 1881 (no zone number on graphic), and 1891 (no zone number on graphic). This may not be a complete list, since the fire alarm program was not available for the 4/19/99 testing.  
**STATUS: Completed.**
7. Modify the fire alarm system program to eliminate the initiation of automatic recall of elevators 1-7 upon activation of either duct smoke detector, serving the two penthouse AHUs in the main EMR. Even though these AHUs only serve the EMR, they should not initiate recall. (NFPA 72, par. 3-8.15)  
**STATUS: Completed.**
8. When tested, duct smoke detector #1892 (AHU #2) did not cause fan shutdown.  
**STATUS: Completed.**
9. Include the EMR and AHU number in the new duct smoke detector descriptors for devices 1891 and 1892.  
**STATUS: Completed.**

10. Add "Elev 1-6" in the ground floor elevator lobby smoke detector (0304) descriptor.  
**STATUS: Completed.**
11. Modify the fire alarm paging feature program to include elevator #8 cab speaker in the selective paging for the elevators, and also, ensure that the "all call" switch selects all elevator cab speaker circuits. We could not test the "all call" paging feature during our tests of 4/19/99.  
**STATUS: The selective paging and "all call" operate satisfactorily. The select tone (elevators 1-8) and the select evacuation (elevators 1-8) are not activating the elevator #8 speaker circuit.**
12. Troubleshoot/repair the elevator cab #4 fire phone or circuit.  
**STATUS: Completed.**
13. Replace the FACP switch labels, which need to be modified. (Example: Elevator cab 1-8 speakers, Elevator 1-8 page select, elevator shunt/recall by-pass)  
**STATUS: Completed.**
14. Modify the fire alarm program such that the "elevator recall and elevator shunt trip by-pass" switch operates for both shunt-trip and recall bypass (all elevators).  
**STATUS: Completed.**
15. Ensure that the following confidence testing items have been corrected and down-loaded:
  - ▶ manual station 0813, stair 4, 4<sup>th</sup> floor, had been removed from the fire alarm program, re-install this device in the program, and
  - ▶ manual station 0203, 2<sup>nd</sup> basement, lit the wrong zone on the graphic annunciator (should be zone 1).**STATUS: Completed.**
16. Provide sprinkler system hydrostatic testing, and flushing certificates in accordance with NFPA 13 requirements. (Reportedly, Mr. Ron Dickey, GSA/COM has these reports)  
**STATUS: Mr. Dickey expects to see these reports soon.**
17. Label all new control valves to indicate the area/zone that they serve. (NFPA 13)  
**STATUS: Completed.**
18. Provide spare sprinklers and cabinet in accordance with NFPA

13 requirements.

**STATUS: Completed.**

19. Provide sprinkler system identification signs in accordance with NFPA 13, par. 8-5, and 2-7.3.

**STATUS: Completed.**

20. Label the elevator power feeds on the circuit breaker panel serving elevators 1, 2, 3, and 7.

**STATUS: Not done.**

21. Provide documentation that the auxiliary relays, used for shunt tripping the elevators, are Listed for use with EST control modules.

**STATUS: Completed.**

RECOMMENDATIONS (5/13/99):

22. Correct the fire alarm program so that the elevator #8 speaker circuit does not automatically activate upon a fire alarm. The speaker should only operate during all call, selective paging, selective tone or selective evacuation.

ITEMS STILL IN NEED OF TESTING

- A. Test all corrections and system changes upon completion. The follow-up testing needs to be conducted when the audio-visual (A/V) devices are active.
- B. Re-test the select tone and select evac for elevators 1-8.
- C. Perform additional confidence testing (10% up to a maximum of 50 devices) upon re-programming of the fire alarm system.
- D. Test the by-pass switches relating to elevator control functions.

**STATUS: Completed.**

- E. Verify all fire alarm system "alarm" device floor (and selective evacuation) actions. A copy of the fire alarm system program is needed.

**STATUS: On-going.**

ITEMS RECOMMENDED BUT NOT INCLUDED IN THE CONTRACT

1. The fire pump run timer is set too low. Currently the fire pump run timer is set for approximately one minute. A 100 HP motor is provided.

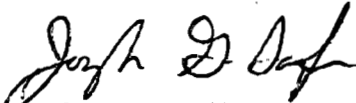
**STATUS:** No change, however, the GSA fire alarm shop expects to change the run timer to approximately seven minutes.

2. The B1 level, elevator #8 pit & EMR tamper switch needs to be adjusted. The existing tamper switch and monitor module are the responsibility of GSA.

**STATUS:** GSA shall adjust this device.

If there are any questions, please contact us.

Sincerely,



Joseph G. Daffin, P.E.  
Senior Fire Protection Engineer

.....

Susan Harrington  
WPMOX  
General Services Administration  
7<sup>th</sup> and D Streets, SW  
Washington, DC 20407  
Room 2080

# facsimile transmittal

**To:** Ron Dickey **Fax:** 202-565-0046  
**From:** Susan Harrington **Date:** 05/17/99  
**Re:** NEOB **Pages:** 7  
**CC:**

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

.....

Ron:

Give me a call when you get a chance concerning the follow-up testing. Thanks.

CONFIDENTIAL

.....

GSA/LR/WPX

(AUTO)

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FILE	FILE TYPE	OPTION	TEL NO.	PAGE	RESULT
047	MEMORY TX		95650046	07/07	OK

## ERRORS

1) HANG UP OR LINE FAIL 2) BUSY 3) NO ANSWER 4) NO FACSIMILE CONNECTION





OCT - 6 1998

MEMORANDUM FOR RON DICKEY  
WHITE HOUSE PROJECTS OFFICE

FROM: SUSAN HARRINGTON  
FIRE PROTECTION ENGINEER  
FIRE PROTECTION ENGINEERING SECTION (WPMOX)

SUBJECT: Fire Protection Engineering Comments

PROJECT TITLE: NEOB  
ELEVATOR UPGRADE  
FIRE PHONE AND SPEAKER SUBMISSION

BUILDING NUMBER: DC0105ZZ

CONTRACTOR (CONSTR. OR A/E): LSSI

SUBMISSION TYPE & DATE: Cutsheets for firefighter's phone and speaker, dtd. 9/12/98

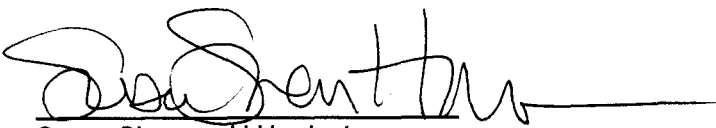
FILE NAME: arvsfstp.doc

XXX Submission is approved as noted.

NO: FIRE AND LIFE SAFETY REVIEW COMMENTS:

1. The cutsheets for the firefighter's phones and speakers for installation in NEOB's elevators are approved. You mentioned that the contractor was installing the same speakers (as were previously installed), so new speakers are not being provided. If you want to reuse the existing firefighter's phones, we don't have a problem with that as long as the existing phones are not damaged. Please let me know if you have any other questions.
2. The cutsheet for the firefighter's phone indicates that breakglass will be provided. Please be sure that the phone box can be opened without a key or break glass. Please also be sure that the outside of the custom box is labeled clearly to indicate that the firefighter's phone is inside.

Reviewed by: (WPMOX)

  
Susan Shemanski Harrington  
Fire Protection Engineering Section  
(202) 708-5236, FAX (202) 708-6618

Susan Harrington  
WPMOX  
General Services Administration  
7<sup>th</sup> and D Streets, SW  
Washington, DC 20407  
Room 2080

## facsimile transmittal

**To:** Ron Dickey **Fax:** 202-565-0046  
**From:** Susan Harrington **Date:** 03/31/99  
**Re:** Testing of NEOB Elevators **Pages:**  
**CC:** Steven Farley 301-459-8666

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Ron:

Per your memo on elevator testing, you said to provide comments regarding the testing by April 2.

I do have a few comments on the testing schedule.

1. There are a few new duct smoke detectors shown on the contract drawings that need to be tested.
2. The fire alarm speakers in each cab also need to be tested.
3. We will randomly test a few existing fire alarm devices on each floor at the final acceptance test because the fire alarm system program was modified. (The scope of work states we can require retesting of up to 10% of the existing building devices.)
4. Please provide red-lined as-built drawings for both the sprinkler work and fire alarm work prior to 4/19.

From the memo, I am assuming that the only day we are required to witness the testing is 4/19.

Please confirm that that is the only day we need to attend. Thanks!

6:30 PM - 2:00 AM

CONFIDENTIAL

## **Sprinkler Requirements:**

### **Elevators 1-6:**

- No new sprinkler work is required.

### **Elevator 7:**

- No new sprinkler work is required.

### **Elevator 8:**

- Provide sprinkler protection for the elevator hoistway and elevator pit.
- Provide an OS&Y valve, with tamper switch, and a waterflow switch for the sprinkler line serving the top of the hoistway.
- Provide an OS&Y valve with tamper switch for the sprinkler line serving the elevator pit.
- Elevator 8 has existing to remain sprinkler protection in the machine room.

## **Fire Alarm Requirements:**

### **Elevators 1-6:**

- No new fire alarm devices are required.
- Connect existing fire alarm shunt trip relays and elevator recall relays to the new elevator system and new shunt trips to provide elevator recall and shunt trip capabilities in accordance with NFPA 72 and ANSI A17.1.
- Relocate the fire alarm shunt trip relays so that they are within 3 feet of the shunt trip.
- Reconnect firefighter's phone and speaker in the elevator cab.

### **Elevator 7:**

- Connect fire alarm shunt trip relays and elevator recall relays to the new elevator system and new shunt trips to provide elevator recall and shunt trip capabilities in accordance with NFPA 72 and ANSI A17.1.
- Relocate any existing fire alarm shunt trip relays so that they are within 3 feet of the shunt trip.
- When the elevator machine room waterflow switch or heat detectors activate, the power to all elevators associated with that machine room must be shunt tripped.
- There are existing to remain smoke detectors, heat detectors, and a waterflow and tamper switch for the elevator machine room.
- Connect all new fire alarm devices to the existing building EST fire alarm system.
- Reconnect firefighter's phone and speaker in the elevator cab.

1.9.6 For detailed requirements refer to Volume II of IV, Division 16 of the specifications.

### 1.9.6 Fire Protection Systems

As part of a recent upgrade, fire protection systems for Elevators #1 through #7 were upgraded to meet latest Fire Safety Standards, including Firemen's Service, Automatic Recall, etc. ~~The existing systems consist of the following:~~

a. Sprinkler System

Main and secondary levels of Elevator Machine Rooms serving Elevators #1 through #7, and Elevator Machine Room #8 are equipped with sprinklers.

Top of hoistways of Elevators #7 and #8 and pits of Elevator #8 are not covered by sprinklers.

Sprinkler system must be modified and expanded to cover top of hoistways and pit of these elevators as follows:

1. ~~Elevator #7~~

~~Provide sprinkler protection at top of the hoistway.~~

~~Provide an OS&Y valve with tamper switch and a waterflow switch for the sprinkler line serving the top of hoistway.~~

~~Existing sprinkler system serving the machine room shall be retained.~~

2. Elevator #8

Provide sprinkler protection for the elevator hoistway and elevator pit.

Provide an OS&Y valve with tamper switch and a waterflow switch for the sprinkler line serving the top of hoistway.

Provide an OS&Y valve with tamper switch for the sprinkler line serving the elevator pit.

Existing sprinkler system serving the machine room shall be retained but control system shall be integrated with new Elevator Smoke Detection and Recall System.

b. Fire Alarm System

Upper Level of Elevator Machine Room for Elevators No. 1 through 7 is equipped with twenty five (25) conventional rate compensating heat detectors and their individual monitoring modules tied into the building EST multiplex fire alarm system. The activation of these units initiate the selective evacuation sequence of the fire

alarm system and cause the power to the elevator to shunt. The upper level of Elevator Machine Room for Elevators No. 1 through 7 is also equipped with twenty five (25) photoelectric type smoke detectors. Activation of these detectors shall initiate elevator recall of these elevators.

The system is in good condition and should be retained with the following modifications:

**Elevators #1-6:**

No new fire alarm devices are required.

Connect existing fire alarm shunt trip relays and elevator recall relays to the new elevator system and new shunt trips to provide elevator recall and shunt trip capabilities in accordance with NFPA 72 and ANSI A17.1.

Relocate the fire alarm shunt trip relays so that they are within 3 feet of the shunt trip.

**Elevator #7**

~~Provide heat detectors at the top of the hoistway.~~

~~Provide a new shunt relay, tamper switch for the new OS&Y valve for the hoistway, and a waterflow switch for the hoistway sprinklers.~~

Connect existing fire alarm shunt trip relays and elevator recall relays to the new elevator system and new shunt trips to provide elevator recall and shunt trip capabilities in accordance with NFPA 72 and ANSI A17.1.

Relocate any existing fire alarm shunt trip relays so that they are within 3 feet of the shunt trip.

Provide the necessary shunt trip devices, so that when the Elevator #7 hoistway waterflow switch or heat detectors activate, only the power to Elevator #7 is shunt tripped. When the elevator machine room waterflow switch or heat detectors activate, the power to all elevators associated with the machine room must be shunt tripped.

There are existing to remain smoke detectors, heat detectors, and a waterflow and tamper switch for the elevator machine room.

Connect all new fire alarm devices to the existing building EST fire alarm system.

**Elevator Lobby Service Panel**

There are existing elevator lobby service panels, with LED lights indicating the smoke detector which has activated. Because the smoke detectors are part of a multiplex fire alarm system and the fire department will know the exact location of the smoke

detector in alarm, the LED lights are no longer required. Remove smoke detector LED lights, demolish existing panels, remove fire alarm system relays, and program the relays out of the fire alarm system program. New Lobby/FFS panels will be provided for each group of elevators under elevator work.

**Elevator #8:**

Provide a complete functioning elevator smoke detection system in accordance with Specification 16726.

Provide new smoke detectors and heat detectors in the elevator machine room and at the top of the hoistway.

Provide new smoke detectors in the elevator lobbies.

Provide a new waterflow and tamper switch for the sprinkler line serving the top of the elevator hoistway.

Provide and OS&Y valve and tamper switch for the sprinkler line serving the elevator pit.

Provide new fire alarm shunt trip relays and elevator relays.

Connect new fire alarm shunt trip relays and elevator recall relays to the new elevator system and new shunt trips to provide elevator recall and shunt trip capabilities in accordance with NFPA 72 and ANSI A17.1.

Connect all new fire alarm devices to the existing building EST fire alarm system.

- 1.11 ~~After completion of modifications, test the entire fire alarm system.~~ \* modify
- 1.12 Provide 40 hours training of Government personnel on all new equipment installed on this project.
- 1.13 For detailed requirements refer to Volume II of IV, Sections 15330 and 16726 of the specifications.
- 2. SAFETY AND ENVIRONMENTAL MANAGEMENT
  - 2.1 Safety and Environmental Requirements
    - 2.1.1 The Contractor shall retain the services of a qualified\* Asbestos Assessment Firm. The firm retained shall be available to provide services to assess conditions in any additional areas of the building (not referenced in this document) which are suspected of having Asbestos Containing Materials (ACM's) and require removal to accomplish the Elevator Improvements. In the event that materials impacting the project are suspected of having Asbestos Containing Materials (ACM), and additional asbestos assessment services are determined to be necessary to accomplish the project, the Asbestos Assessment Firm shall conduct an asbestos

**SECTION 16726 - ELEVATOR SMOKE DETECTION SYSTEM (MULTIPLEX)**

**PART 1.            GENERAL**

**1.1 DESCRIPTION OF WORK**

- A.    **Scope:** The extent of elevator smoke detection system is indicated by the Design-Build Vertical Transportation Improvements documents, by requirements of this Section, and Section 16010, "Electrical Basic Requirements."
- B.    **Description of Work:** This work includes designing and modifying the existing building multiplex fire alarm system to provide a complete elevator smoke detection system as described herein and in Volume II, Section II, Parts 2 and 3 of the Contract Documents. The system shall include addressable interface devices, smoke detectors, waterflow detectors and heat detectors. The system shall be connected to the existing building fire alarm system as described herein. Final connection to the building fire alarm system shall be performed by the electrical contractor. The system shall include all wiring, raceways, pull boxes, outlet and mounting boxes, and all other accessories and miscellaneous items required for a complete and operating system even though each item may not be specifically mentioned or described. The system shall be part of the building fire alarm system and connected to the elevator controllers.
- C.    **Extent of the Work:** The system shall be installed in accordance with the drawings, specifications and referenced publications.
- D.    **Existing Smoke Detection Equipment:** Existing smoke detection equipment shall be maintained fully operational until the new equipment has been tested and accepted by the Government. As new equipment is installed, it shall be labeled "NOT IN SERVICE" until the new equipment is accepted. Once the new system is completed, tested, and accepted by the Government it shall be placed in service and connected to the building fire alarm system. All new equipment shall have tags removed and the existing equipment shall be tagged "NOT IN SERVICE" until removed from the building.
- E.    **Equipment Removal:** After acceptance of the new system by the Government, all existing, disconnected equipment shall be removed and all damaged surfaces shall be restored. Operational equipment which was removed shall be carefully packaged and delivered to the Contracting Officer.
- F.    **Related Sections:** Refer to other Division 07, 14, 15 & 16 sections for:
  - Cable
  - Wire
  - Raceways
  - Connectors
  - Firefighter's Service Panel
  - Wet Pipe Sprinkler Systems
  - Firestopping
- G.    **Existing Building Fire Alarm System:** The existing building fire alarm system is an EST, multiplex/addressable system. Wiring for the system's signaling line circuits is style B-4-Y.

## 1.2 QUALITY ASSURANCE

- A. **Installer Qualifications:** Design shall be by a NICET Level III or IV Technician or a Registered Fire Protection Engineer. Installation shall be accomplished by an electrical contractor with a minimum of three (3) years experience in the installation of detection systems. The Contracting Officer may reject any proposed installer who cannot show evidence of such qualifications. The services of a technician provided by the control equipment manufacturer shall be provided to supervise installation, and provide all required reprogramming, tests and adjustments of the existing system. Design and installation must be performed by an electrical contractor whose business is located within a 120 kilometers radius of the Capitol and whose business has been operated and established within this radius for at least three (3) years.
- B. **Guarantee:** The contractor shall guarantee labor, materials, and equipment provided under this contract against defects for a period of one year after the date of final acceptance of this work by the government.
- C. **Applicable Publications:**
  - 1. **American Society for Testing and Materials (ASTM):**
    - a. E 84 Standard Test Method for Surface Burning Characteristics of Building Materials
    - b. E 119 Standard Test Methods for Fire Tests of Building Construction and Materials
  - 2. **American Society of Mechanical Engineers (ANSI/ASME):**
    - a. A17.1 Safety Code for Elevators and Escalators
  - 3. **Building Officials & Code Administrators International Inc. (BOCA):**
    - a. National Building Code
  - 4. **Factory Mutual Engineering and Research Corp. (FM):**
    - a. P7825 Approval Guide
  - 5. **National Fire Protection Association (NFPA):** Provide a system conforming to the requirements of the latest edition of the following publications including all amendments to these publications:
    - a. 70 National Electric code (NEC)
    - b. 72 National Fire Alarm Code
    - c. 13 Standard for the Installation of Sprinkler Systems
  - 6. **Testing Services or Laboratories:** Construct all fire alarm and fire detection equipment in accordance with the latest edition of the following publications from Underwriters Laboratories (UL), or Factory Mutual Engineering Corporation (FM):
    - a. UL 217 Single and Multiple Station Smoke Detectors.
    - b. UL 268 Smoke Detectors for Fire Protective Signaling Systems.
    - c. UL Fire Protection Equipment Directory



- d. UL Electrical Construction Materials Directory
- e. FM P7825 Approval Guide

### 1.3 DEFINITIONS

- A. General: Wherever mentioned in this specification or on the drawings the equipment, devices, and functions shall be defined as follows:
1. Alarm Signal: A signal which signifies a state of emergency requiring immediate notification of the fire department and of the building occupants. These are signals such as the operation of a activation of a waterflow or pressure switch from a sprinkler system, a heat detector, and the receipt of an alarm signal from a elevator smoke detector that has gone through alarm verification.
  2. Trouble Signal: A signal which indicates that a fault, such as an open circuit or ground, has occurred in the system.
  3. Multiplex System: A system in which multiple signals are transmitted via the same conduction path to a central control panel, decoded and separated so that each signal will initiate the specified response.
  4. Interface Device: An addressable device which allows hard wired systems or devices to communicate with a multiplex system.
  5. FACP (Fire Alarm Control Panel)/CCU (Central Control Unit): System control panel consisting of the central processing unit (CPU) and all storage, memory units and output terminals, video display units (VDU) and printers.
  6. Class B Wiring - Multiplex Systems: A circuit that is electrically supervised such that a single break or a single ground fault condition will be indicated by a trouble signal on the FACP no matter where the break or ground fault condition occurs. In accordance with NFPA 72 this would be Style 4 wiring for signaling line circuits and Style Y indicating appliance circuits for alarm indicating devices.

### 1.4 SYSTEM OPERATION

- A. General: The existing system is a complete, Class B supervised, noncoded, multiplex fire alarm system. The system shall be activated into the alarm mode by actuation of any alarm initiating device. The system shall remain in the alarm mode until all initiating device(s) are reset and the fire alarm control panel is manually reset and restored to normal. The system shall provide the following functions and operating features:
1. All detection circuits shall be electrically supervised. All circuits from the panel to relays for recalling the elevators or for operating the shunt trip breaker shall also be electrically supervised.
  2. The operation of any smoke detector (after alarm verification) shall automatically initiate the recall of the elevator to the proper floor (either designated or alternate depending upon the detector's location) by sending a signal to the elevator controller(s). It shall also send an alarm signal to the building fire alarm control panel (FACP). Detector verification shall be set to 30 seconds.
  3. The operation of any heat or waterflow detector shall automatically send an alarm signal to the building FACP.
  4. The maximum permissible elapsed time between the actuation of any detector and its indication at the FACP is five seconds.

5. The operation of any heat or waterflow detector shall automatically disconnect power to the elevator. This shall be accomplished by activation of a supervised, field mounted relay which is tied into a shunt-trip breaker (shunt trip not provided under this section.)
6. Locations: Arrange the location of the smoke, heat and water flow detectors as follows:
  - a. Smoke detector(s) located in the lobby on the **designated** floor.
  - b. Smoke detectors located in the elevator machine room, at the top of the shaft(s) and in the lobbies of all floors other than the designated floor.
  - c. Heat detector(s) located in the machine room and at the top of the shaft.
  - d. Waterflow detector located in the machine room.

#### 1.5 ELECTRICAL SUPERVISION

- A. System Supervision: Provide a system having electrical supervision in accordance with the requirements of NFPA 72. Provide Class B supervision on all circuits. Circuit faults shall be indicated with both a zone and a trouble signal at the FACP.

#### 1.6 SUBMITTALS

- A. Division 1: Refer to Section "SUBMITTALS" for basic information relating to submittal requirements. Submit 6 complete sets of submittals. Partial submittals will not be acceptable and will be returned without review. Before any work is commenced, the submittal must be approved by GSA Safety and Environment Branch. Manufacturer's data shall be annotated and provided for the following:
  1. Smoke Detectors
  2. Field Mounted Relay & Enclosure
  3. 100 mm Alarm Bell
  4. Waterflow Detectors
  5. Heat Detectors
  6. Interface Devices
  7. All wiring, all sizes and types
  8. Tamper switches
  9. All other associated equipment
- B. Shop Drawings: Submit shop drawings not smaller than 760 mm by 1070 mm. As a minimum, the shop drawing submittal shall include the following:
  1. Provide point-to-point wiring diagrams showing the points of connection and terminals used for all electrical field connections in the system, including all interconnections between the FACP and all equipment which is supervised or controlled by the system. Diagrams shall show all connections from field devices to the FACP, initiating circuits, switches, relays and terminals.
  2. Provide a complete description of the system operation.
  3. Include annotated catalog data showing manufacturer's name, model, voltage, and catalog numbers for all equipment and components.
  4. Provide complete riser diagrams indicating the wiring sequence of all devices and their connections to the control equipment. Provide a color code schedule for the wiring. Schedule shall match that used for the existing wiring. Provide floor plans showing the location of all devices and equipment.

## 1.7 OPERATION AND MAINTENANCE MANUALS

- A. General: Not less than thirty days prior to the final acceptance testing of the entire system, and for use during the instruction period hereinafter specified, provide five bound copies of an Operation and Maintenance Manual to the Contracting Officer. The manual shall include an index, copies of all approved shop drawings and submittal materials (updated to as-built), and a complete parts list of all components. The manual shall also include the following: the manufacturer's name, the serial number, an ordering number, and a physical and electrical description. This information shall be provided for each item or part, if applicable.

## 1.8 INSTRUCTION OF GOVERNMENT EMPLOYEES

- A. Factory Instructor: Provide an experienced factory instructor to the Government employees designated by the Contracting Officer, in the care, adjustment, maintenance, and operation of the new devices.
- B. Qualifications: Each instructor shall be thoroughly familiar with all parts of the installation on which he is to give instruction. He shall be trained in operating theory as well as in practical operation and maintenance work, and have a minimum of two years of experience.
- C. Required Instruction Time: Provide one (1) work day (8 hours = 1 day) of instruction after final acceptance of the system. The instruction shall be given during regular working hours on such dates and times as are selected by the Contracting Officer. The instruction may be divided into two or more periods at the discretion of the Contracting Officer.

## 1.9 AS-BUILT DRAWINGS

- A. General: Prepare and submit to the Contracting Officer five sets of detailed "As Built Drawings." The drawings shall include complete wiring diagrams showing connections between all devices and equipment, both factory and field wired. Include a riser diagram and drawings showing the as-built location of all devices and equipment. The drawings shall show the system as installed, including all deviations from both the project drawings and the approved shop drawings. The drawings shall be prepared on uniform sized sheets not less than 760 mm by 1070 mm. Submit these drawings within two weeks after the final acceptance test of the system.

## PART 2. - PRODUCTS

### 2.1 SMOKE DETECTORS

- A. Photoelectric Smoke Detectors: Provide addressable photoelectric smoke detectors as follows:
  - 1. Provide photoelectric smoke detectors utilizing the photoelectric light scattering principle for operation. The detector sensitivity shall fall between 6.6 and 9 percent per meter smoke obscuration using the Underwriters Laboratory 217/268 Test Box.
  - 2. Provide self restoring type detectors which do not require any readjustment after actuation to restore it to normal operation. Detectors shall be UL listed as Smoke-Automatic Fire Detectors. Install detectors in accordance with the requirements described in the listing.
  - 3. Provide infrared detector light source with matching silicon cell receiver. The unit shall have a twist lock base with encapsulated electronic circuitry. It shall neither utilize nor

require springs to maintain contact between the detector and its base. Provide companion mounting base with fixed wiring terminals.

4. The unit shall not be sensitive to changes in humidity. All components shall be rust and corrosion resistant. Vibration shall have no effect on the detector's operation. Protect the detection chamber with a fine mesh metallic screen which prevents the entrance of insects or air born materials. The screen shall not inhibit the movement of smoke particles into the chamber.
5. Provide detectors with a visual indicator to show the detector has operated. Detectors shall have a factory serial number or other permanently attached designation to identify the particular detector, its location in the system and its sensitivity setting. Detectors provided under this contract shall be low voltage, rated for use on a 24 volt DC system.
6. Detectors shall be equipped with screw terminals for each conductor.

## 2.2 HEAT DETECTORS

- A. Rate Compensating Heat Detectors: Provide addressable rate compensating heat detectors as follows:

1. Provide detectors designed for of fire by rate compensating principal. Provide detectors which have both a lower temperature rating and a higher sensitivity (often characterized by a lower Response Time Index RTI) than the adjacent sprinkler heads. Detectors shall be equipped with screw terminals for each conductor. Provide detectors designed for surface outlet box mounting and supported independently of wiring connections. Detectors shall be hermetically sealed and automatically resetting type which will operate when ambient air temperature reaches detector setting regardless of rate of temperature rise. Detector operation shall not be subject to thermal lag.
2. Provide detectors with a visual indicator to show that the detector has operated.

## 2.3 WATERFLOW DETECTORS:

- A. Provide vane type waterflow detectors for wet pipe sprinkler systems. The device shall contain single pole, single throw contacts. Equip the detector with a pneumatic time delay, field adjustable from zero to ninety seconds. The time delay shall be set initially to 0 seconds. The device shall be a UL listed Extinguishing System Attachment rated for the particular pressure and location at which it is installed. Provide separate screw terminals for each conductor connected to the detector.

## 2.4 FIELD MOUNTED RELAY

- A. Provide a field mounted relay in a NEMA 1 "General Purpose Enclosure." The relay shall have a coil rated at 24VDC and normally open contacts rated at 600VAC, 5 amps. Enclosure shall be painted red and labeled "BRKR SHUNT RELAY." The enclosure shall be located within .9 meters of the shunt trip circuit breaker.
- B. Provide a field mounted relay in a NEMA 1 "General Purpose Enclosure." The relay shall have a coil rated at 24VDC and normally open contacts rated at 600VAC, 5 amps or be compatible with the elevator controller voltage. Enclosure shall be painted red and labeled "ELEVATOR RECALL RELAYS". The enclosure shall be located within .9 meters of the elevator control panel.

## 2.5 ADDRESSABLE INTERFACE DEVICES

- A. Provide addressable interface devices for monitoring normally-open or normally-closed contact devices such as water flow switches and valve supervisory switches.
- B. Provide addressable devices with an integral relay that can be used to provide signals to the elevator controller to initiate recall or the shunt trip breaker for power shutdown.

## PART 3. - EXECUTION

### 3.1 SYSTEM FIELD WIRING

- A. **Wiring Within Cabinets, Enclosures, Boxes and Fittings:** Provide wiring installed in a neat and workmanlike manner and installed parallel with or at right angles to the sides and back of any box, enclosure or cabinet. All conductors which are terminated, spliced, or otherwise interrupted in any enclosure, cabinet, mounting or junction box shall be connected to terminal blocks. Mark each terminal in accordance with the wiring diagrams of the system. Make all connections with approved pressure type terminal blocks.
- B. **Alarm Wiring:** Signaling line circuit field wiring shall be solid copper, No. 18 AWG size conductors at a minimum. Install all conductors in rigid metal conduit or electrical-metallic tubing. Run conduit or tubing concealed unless specifically shown otherwise on the drawings.
- C. **Color Coding:** Distinctively color code all wiring differently from the normal building wiring. Color code shall match the existing color code.
- D. **Smoke detection wiring and all other fire alarm wiring shall be installed in a separate conduit system. Smoke detection wiring and all other fire alarm wiring shall not be installed in the same raceway with elevator control wiring.**

### 3.2 FIRESTOPPING

- A. **General:** Firestop all holes for conduit, piping, or other penetrations which pass through floor slabs, fire-rated walls, partitions with fire-rated doors, vertical service shafts, or any fire-rated assemblies in accordance with Section 07270, Firestopping.

### 3.3 INSTALLATION OF FIRE ALARM INITIATING DEVICES

- A. **Water Flow Detectors:** Locate waterflow detectors at respective control valve assembly.
- B. **Smoke Detectors:** Locate smoke detectors at each elevator lobby, in the shaft and machine room. Install detectors in elevator lobbies, in accordance with the requirements of NFPA 72. For elevator machine rooms and elevator shafts which are protected by automatic sprinklers, locate detectors on the ceiling, so that there is one detector located no more than 610 mm horizontally from each sprinkler head location in the area, in accordance with NFPA 72. Closer spacing shall be used when recommended by the detector manufacturer. The installation shall comply with the requirements NFPA 72. Install smoke detectors no closer than 12.7 meters from registers.

Susan Harrington  
WPMOX  
General Services Administration  
7<sup>th</sup> and D Streets, SW  
Washington, DC 20407  
Room 2080

.....

# facsimile transmittal

**To:** Ron Dickey

**Fax:** 202-254-3667

**From:** Susan Harrington

**Date:** 10/06/98

**Re:** NEOB Cutsheets

**Pages:** 1

**CC:**

☐ Urgent

☐ For Review

☐ Please Comment

☐ Please Reply

☐ Please Recycle

.....

Ron:

This is a follow-up to our conversation today. Let me know if you have any questions.

**CONFIDENTIAL**

.....

♦ GSA WHITE HOUSE PROJECTS OFFICE ♦  
750 17TH STREET, NW  
SUITE 350  
WASHINGTON, D.C. 20006 → type of  
(202)254-8086 phone  
FAX:(202)254-3667

---

FACSIMILE TRANSMITTAL COVER SHEET

DATE: 9/18/98

TO: Susan Harrington

FAX NUMBER: 708-6618

FROM: Anna Putz / Ron Dickey

SUBJECT: NEOB

NUMBER OF PAGES (including this page): 6

MESSAGE: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\*\* Please contact this office at (202)254-8086 if you have not received the total number of pages indicated.

**Montgomery KONE**

Steven Farley Tel 301.459.8660  
Modernization Project Manager Fax 301.459.8666

Washington D. C. Branch  
4420 Lottsford Vista Road  
Lanham, MD 20706

*GSA Received -  
14 Sept - 98*

**NEOB.TRANSMITTAL.105**

12 September 1998

Ronald Dickey / Construction Manager, for GSA  
GSA White House Projects Office  
750 17<sup>th</sup> Street, NW, Suite 350  
Washington D.C. 20006  
Tel 202.254.8086  
Fax 202.254.3667

Re : New Executive Office Building  
GS-11P97MKC0015 Project IDC 68035  
Montgomery KONE CTS-92414-24& CPS-92425  
Fire Phone and Fire Alarm Speaker Submission

See enclosed two sheets for the Wheelock Fire Phone Speaker and two sheets for the Edwards System Technology Fire Alarm Telephone.

To our knowledge these are the same type devices presently installed and utilized at NEOB in Elevator 1-6, 7 and 8 are fully compatible with the existing Life Safety Systems at NEOB.

We request review with comments and/or approval based on comments prior to September 16, 1998 or sooner if possible to facilitate Elevator Inspection for Passenger/Freight Use.

We are available for discussion of this proposed schedule anytime.

Sincerely,

  
Steven Farley  
Modernization Project Manager/MKO/220



**GENERAL SERVICES ADMINISTRATION  
NATIONAL CAPITAL REGION  
WASHINGTON, D.C.**

**PROJECT:** Design/Build Vertical Transportation Improvements  
Passenger Elevators #1 through #6, Passenger/Freight  
Elevator #7 and Freight Elevator #8

New Executive Office Building  
Washington, D.C.

**CONTRACT NO.:** GS-11P97MKC0015

**CONTROL NO.:** IDC 68035

**VOLUME III OF III - RESPONSE TO COMMENTS AND  
STRUCTURAL ANALYSIS**

**FINAL SUBMISSION**

**Submitted By:**

PKP Engineers, P.C.  
4906 Wisconsin Avenue, N.W.  
Washington, D.C. 20016

2

Complied - Asbestos and Lead paint areas are listed in specifications sections. (Per PKP's telecom of 3/16/98 with Mr. Tim Sleuth.

E. Fire and Life Safety review comments by Susan Harrington

<u>Comment No.</u>	<u>Response</u>
1	Complied. <i>should be photos</i>
2	Ionization type smoke detectors have been indicated on the mechanical drawings. These duct detectors have been also indicated under the Fire Alarm drawings.
3	Circuit provided for Fire Alarm relay use. Panel will be on emergency power when the future generator is provided.
4	Will comply by adding detail and note to drawings
5	Will comply by adding note to drawing
6	Will comply by revising drawing to indicate connection of new speaker in elevator #8 to existing speaker circuit for elevators 1-7
7	Will comply by revising drawing to indicate connection of new fire phone in elevator #8 to "Spare Phone Select" switch (and to re-label switch as "Elev. 8 Phone Select".
8	Drawing revised to indicate elevator #8 primary recall to Service Level and alternate recall to 2nd floor. Control modules for recall of elevators 1-7 are existing to be relocated and existing recall arrangement shall stay the same.
9	Complied.
10	See Elevator Consultant, Technical Inspection, Inc. response.
11	See Elevator Consultant, Technical Inspection, Inc. response.
12	See Elevator Consultant, Technical Inspection, Inc. response.
13	Will comply by correcting text in specification section.
14	Bronze swing check valve is not UL listed or FM approved. We were unable to find a threaded swing check valve that was UL listed or FM approved. Please advise and we will revise the material submittal.
15	Two sets of SPDT contacts will be provided.

- 16 A cut sheet for the AGF Model "1000" test and Drain has been included in the material submittal.
- 17 Heads have been changed from Viking uprights and sidewalls to Central model 'A' uprights and sidewalls.
- 18 Two sprinkler heads are needed for adequate protection per contract drawings.
- 19 When we surveyed the area, we were unable to look above the ceiling, therefore, we were unable to determine the correct pipe size. When the work begins, the pipe will be sized accordingly and taken from the correct existing pipe size. *→ please be sure not change to Contract*
- 20 Detail provided.
- 21 Noted on shop drawings.
- 22 Noted on shop drawings.
- 23 Complied.
- 24 Complied.
- 25 Complied.
- 26 Complied.
- 27 All HVAC ductwork under this scope of work is contained within the elevator machine room. No new fire dampers are required.
- 28 This item has been coordinated with architectural to restore wall opening within rated construction.
- 29 There is an existing battery pack emergency light (see dwg. 9-E-4). There is no exit light.
- 30 See revised shop drawing.

GSA WHP-E 2.30 3/27/98 Drawings

<u>COMMENT</u>	<u>RESPONSE</u>
DWG 9M1	Complied, schedule corrected. Car ventilation system wiring of operation is by elevator section.
DWG 9M2	Complied, note revised.
DWG 9M3	See response to mechanical reviewer comment #9 above.

# TECHNICAL INSPECTION, INC.

## Susan Harrington Review Comments (date April 20, 1997)

1. **Harrington Review Comment #10:** Specification 14200, Section 2.07 C.3., Please delete, "the future addition of" from the first sentence. The firefighters' phone and fire alarm speaker will be installed in this project.

Response: We have complied. Specification has been modified accordingly.

2. **Harrington Review Comment #11:** Specification 14200, Section 2.08 A., the wiring sizes listed do not comply with the wiring sizes listed on Drawing 9-FA-02. Please refer to Drawing 9-FA-02 for correct wiring sizes and modify the specification accordingly.

Response: We have complied, Paragraph 2.08 A., now reads:

"A. Provide and Install Wiring, Conduit, Terminal Strips and Boxes for Connection to the Firefighters' Telephone System and the Fire Alarm Speaker System as follows:

1. The wiring for the Firefighters' Phone System shall be a minimum of two pairs of 20 AWG twisted shielded conductors from the traveling cable.
2. The wiring for the Speaker System shall be a minimum of two pairs of 20 AWG twisted shielded conductors from the traveling cables.
3. Provide Conductors for both the Firefighter's Telephone System and the Fire Alarm System Communication Circuit in 25 mm conduit from the Traveling Cable, located under the Car Platform or in the Car Operating Panel, to a terminal Cabinet located on the Elevator Car Top. Conductors shall be labeled and connected to the terminal strips within the Cabinet.
4. Traveling Cable Conductors for the both the Firefighters' Telephone System and the Fire Alarm System Communication Circuit shall be run from the Machine Room Elevator controller in 25 mm conduit to a terminal strip in a cabinet located on the Machine Room Wall. Conductors shall be labeled and connected to terminal strips within the Cabinet.
5. Terminal Cabinets shall be identified by a red cover and permanently attached laminated label that reads "FIRE ALARM SYSTEM".

3. **Harrington Review Comment #12:** Specification 14245, Section 2.08 A, the wiring sizes listed do not comply with the wiring sizes listed on Drawing 9-FA-02. Please refer to Drawing 9-FA-02 for the correct wiring sizes and modify the specification accordingly.

Response: We have complied, Paragraph 2.08 A., now reads:

"A. Provide and install wiring, conduit, terminal strips and boxes for connection to the Firefighters' Telephone System and the Fire Alarm Speaker system as follows:

1. The wiring for the Firefighters' Phone System shall be a minimum of two pairs of 20 AWG twisted shielded conductors from the traveling cables.
2. The wiring for the Speaker System shall be a minimum of two pairs of 20 AWG twisted shielded conductors from the traveling cable.

**Review Comment Responses**

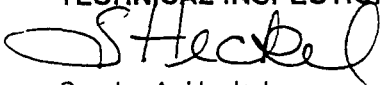
## TECHNICAL INSPECTION, INC.

3. Provide conductors for both the Firefighters' telephone system and the Fire Alarm System communication circuit in 25 mm conduit from the traveling cable, located under the car platform or in the car operating panel, to a terminal cabinet located on the elevator car top. Conductors shall be labeled and connected to the terminal strips within the cabinet.
4. Traveling cable conductors for the both the Firefighters' telephone system and the Fire Alarm System Communication Circuit shall be run from the machine room elevator controller in 25 mm conduit to a terminal strip in a cabinet located on the machine room wall. Conductors shall be labeled and connected to terminal strips within the cabinet.
5. Terminal cabinets shall be identified by a red cover and permanently attached laminated label that reads "FIRE ALARM SYSTEM".

If you have any questions regarding this matter, please call.

Sincerely,

TECHNICAL INSPECTION OF D.C., INC.



Sandra A. Heckel  
Contract Coordinator

Enclosures

Susan Harrington  
WPMOX  
General Services Administration  
7<sup>th</sup> and D Streets, SW  
Washington, DC 20407  
Room 2080

# facsimile transmittal

To: Ron Dickey

Fax: 202-254-3667

From: Susan Harrington

Date: 08/18/98

Re: NEOB Elevator Project

Pages: 3

CC:

☐ Urgent

☐ For Review

☐ Please Comment

☐ Please Reply

☐ Please Recycle

Ron:

Attached are my comments. The only real problem is that they didn't resubmit the fire alarm shop drawings and cutsheets. (I approved the previous submission as noted, but had asked for a resubmittal of the fire alarm cutsheets and shop drawings.) I still need the fire alarm cutsheets and shop drawings. Once I receive those and can back-check my comments, we should be all set.

16 D  
(202) 210-9415  
15M 116424 116M  
890  
254 8090

CONFIDENTIAL

MEMORANDUM FOR RONALD DICKEY  
CONSTRUCTION ENGINEER  
WHITE HOUSE PROJECTS OFFICE

FROM: SUSAN S. HARRINGTON   
FIRE PROTECTION ENGINEER  
FIRE PROTECTION ENGINEERING SECTION (WPMOX)

SUBJECT: Fire Protection Engineering Comments

PROJECT TITLE: DESIGN/BUILD ELEVATOR UPGRADE  
NEW EXECUTIVE OFFICE BUILDING  
FINAL DESIGN SUBMISSION

BUILDING NUMBER: DC0105ZZ

JOB NUMBER: IDC 68035

CONTRACTOR (CONSTR. OR A/E): PKP Engineers, P.C.

SUBMISSION TYPE & DATE: Final design drawings; dtd. 7/98

FILE NAME: Elevator design Final.doc

**XXX Resubmission of the fire alarm cutsheets and shop drawings is required.**

**NO: FIRE AND LIFE SAFETY REVIEW COMMENTS:**

**PREVIOUS COMMENTS:**

1. Drawing 3-A-2: Note #3 states to reuse existing hardware on the new 1-1/2 hour fire rated door. Is the hardware listed for use on a 1-1/2 hour fire rated door? If not, please provide new hardware listed for use on a fire door.

*Status: Response to comments states that MKO/NCI-NCI will furnish new door hardware for the new 1-1/2 hour fire door. However, Note #3 still states that the hardware can be reused. Please revise.*

**Fire Alarm Shop Drawings and Cutsheets**

2. The shop drawings do not indicate the installation of two new photoelectric duct smoke detectors with associated relay for air handler shutdown. Please include these devices on the drawings. Please provide a cutsheet for the duct detector housing/tubes (the photoelectric detector and control module cutsheets were provided with the current package.)

*Status: Response says will do, but shop drawings were not resubmitted. Please provide shop drawings for review.*

3. The shop drawings do not show the installation of new fire alarm speakers and firefighter's phones in the elevator cabs. Please revise and indicate how this will be accomplished. Please note that the speakers must be on page only circuits. Please refer to Contract Drawing FA-01 for the extent of work.

*Status: Response says will do, but shop drawings were not resubmitted. Please provide shop drawings for review.*

4. Please provide cutsheets for the firefighter's phones and fire alarm speakers.

*Status: Response says will do, but shop drawings were not resubmitted. Please provide cutsheets for review.*

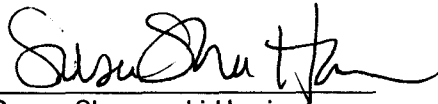
5. Please provide cutsheets for the wiring.

*Status: Response says will do, but shop drawings were not resubmitted. Please provide cutsheets for review.*

6. Sequence of Operation, Page 3: Under Item 14, please revise it so that it states that the primary level of recall for Elevator #8 is the service level, the alternate level is the 2<sup>nd</sup> floor. For Elevators 1-7, the primary level of recall is the "G" (Ground) level and the alternate is the B1 level.

*Status: Response says will do, but shop drawings were not resubmitted. Please provide shop drawings for review.*

Reviewed by:



Susan Shemanski Harrington  
Fire Protection Engineering Section  
(202) 708-5236, FAX (202) 708-6618



KONE

KONE

Steven Farley  
Modernization Project Manager  
Tel 301.459.8660  
Fax 301.459.8666

Washington D. C. Branch  
4420 Lottsford Vista Road  
Lanham, MD 20706

TRANSMITTAL.080

1998

Steven Farley / Construction Manager, for GSA  
White House Projects Office  
1500 Pennsylvania Avenue, NW, Suite 350  
Washington D.C. 20006  
202.254.8086  
202.254.3667

RECEIVED  
AUG 05 1998

New Executive Office Building  
GS-11P97MKC0015 Project IDC 68035  
Montgomery KONE CTS-92414-24 & CPS-92425  
100% Review Comment Response

Please review the enclosed 100% Review Comment Response. Eleven (11) Marked-Up  
revised engineering drawing sheets will follow this date under separate transmittal.

Sincerely,

Steven Farley

Modernization Project Manager/MKO/220

CL. Susan  
Ron  
Tim

1000 1000

SUBJECT: D/B VERTICAL TRANSPORTATION IMPROVEMENTS/NEOB

Annotated PKP #:M697-4500

SUBJECT: RESPONSE TO GSA COMMENTS ON 100% SUBMISSION

Response by PKP Engineers, PC

MKO/NCI response by Steven Farley/Project Manager/MKO

REVIEWER: Susan Harrington, Fire Protection Engineering

<u>COMMENT</u>	<u>RESPONSE</u>
----------------	-----------------

- |    |  |
|----|--|
| 1  | MKO/NCI-NCI will furnish new door hardware for new fire 1 ½ Hr rated fire door.  |
| 2  | PKP-Door to remain. No fire rated door required.   |
| 3  | PKP-Photoelectric type smoke detectors have been indicated on the mechanical drawings. MKO/NCI-NCI will direct UL&P to proceed with adding duct smoke detectors. UL&P will prepare record submission to MKO <u>ASAP</u> to facilitate record submission to GSA/WHPO.   |
| 4  | PKP-Complied. Detail No. 1 - Added check valve in sprinkler piping, on the system side of the control valve before the system water flow switch.<br><br>Added new detail "Existing Sprinkler Placement, Elevator Machine Room Upper Level". Detail includes contractor installation of sprig-ups on eight (8) existing sprinkler locations to raise the sprinkler deflector to 4 inches below the finished ceiling.<br>MKO/NCI-NCI will direct Capitol Sprinkler as to the applicable changes to their scope of work and revise work plans to include changes as indicated. MKO work plans to follow with added work phasing requirements. |
| 5  | PKP-Complied.  |
| 6  | MKO/NCI-Firestopping submitted with 50%, 95% and 100% Submission, Tab 3, Section 07270, Volume 1 of 1.   |
| 7  | PKP-Complied.  |
| 8  | MKO/NCI-NCI will direct UL&P to proceed with adding duct smoke detectors. UL&P will prepare record submission to MKO <u>ASAP</u> to facilitate record submission to GSA/WHPO.  |
| 9  | MKO/NCI-NCI will direct UL&P to proceed with furnishing and installing Firefighter's Phone and Fire Alarm Speakers. Firefighter's Phone and Fire Alarm Speakers to coincide and be compatible with existing Fire Communication System. UL&P will prepare record submission to MKO <u>ASAP</u> to facilitate record submission to GSA/WHPO.   |
| 10 | MKO/NCI-NCI will direct UL&P per Response 9 above. UL&P to provide   |

cutsheets.

**MKO/NCI-NCI** will direct **UL&P** per Response 9 above. **UL&P** to provide cutsheets.

**MKO/NCI- NCI** will direct **UL&P** to provide record submission for Tab 31, Vol 1 of 1, Section 16726 to reflect the following :

Elevator 1-7 Main Fire Recall Floor G

Alternate Fire Recall Floor B1

Elevator 8 Main Fire Recall Floor S

Alternate Fire Recall Floor 2

**MKO/NCI-NCI** will direct **UL&P** to provide system printout 30 days prior to any program changes to **MKO** to facilitate submission to **GSA/WHPO**.

**PKP**-This item has been coordinated with architectural to restore wall opening within rated construction. Note was also added on mechanical drawing. **NCI**-Note change as applicable.

**PKP**-Added additional light. See drawings. **MKO/NCI-NCI** will direct **UL&P** to furnish and install additional emergency lighting as shown in engineering plans for Elevator 1-7 and Elevator 8 machine rooms. **UL&P** furnish record submission for emergency light fixtures ASAP to **MKO** to facilitate record submission to **GSA/WHPO**.

**MKO**-Fire Alarm Speaker for elevator cab interior speaker is located in cab ceiling above Auxiliary Car Operation Panel for Elevator 1-6. The Fire Alarm Speaker is located in the ceiling above the Main Car Operation Panel for Elevator 7 & 8. Elevator cab shop drawings indicate this location.

**PKP**- Complied. The 20 AWG wiring indicated in Section 208A, items #1 and 2 has been changed to 18 AWG to match drawings 9-FA-02.

**MKO/NCI-NCI** will direct **UL&P** to change and comply with engineering.

**PKP**-Complied. The 20 AWG wiring indicated in Section 208A, items #1 and 2 has been changed to 18 AWG to match drawings 9-FA-02.

**MKO/NCI-NCI** will direct **UL&P** to change and comply with engineering.

4 August 1998

PROJECT: D/B VERTICAL TRANSPORTATION IMPROVEMENTS/NEOB

MKO Annotated PKP #:M697-4500

SUBJECT: RESPONSE TO GSA COMMENTS ON 100% SUBMISSION  
Post Award Asbestos and Lead Paint Abatement

MKO/NCI response by Steven Farley/Project Manager/MKO.

I. REVIEWER: Timothy Sleeth, Safety and Environmental Branch, June 15, 1998

- 1 **MKO/NCI-MKO** submitted under transmittal.057, 7.20.98, District of Columbia License of Daniel Wilcox of T & P Engineering. Additional T & P employee license have been applied for and record will follow upon receipt.
- 2 **MKO/NCI-We** do not believe the ACM or LBP abatement submitted under our Tab 1, Section 02085 & 02090 and our Hoistway Door Removal and Disposal Plans under transmittal063 requires EPA or DC notification.
- 3 **MKO/NCI- Refer** to the Hoistway Door Removal and Disposal Plan submitted under our transmittal058 & revised 063. GSA has indicated acceptance under WHPE#45.2 enclosing July 27, 1998 Post Award Asbestos and Lead Paint Abatement Submittals comments. **MKO/NCI** will comply with comment as proceed as directed.

VERTICAL TRANSPORTATION IMPROVEMENTS/NEOB

PKP #: M897-4500

RESPONSE TO GSA COMMENTS ON 100% SUBMISSION (MECHANICAL)

by PKP Engineers, PC

by Steven Farley/Project Manager/MKO.

OWNER: Ronald Wood, Mechanical

**COMMENT**      **RESPONSE**

PKP-Plates were incorporated on detail. MKO/NCI-NCI note change and act accordingly to furnish and install.

PKP-No such reference was found. Sequence refers to 18°C for internal conditions only. Low ambient is for -18°C. Drawing was revised to clarify.

MKO/NCI-NCI will direct Magnolia Plumbing to response.

PKP-Double nut was incorporated on detail. MKO/NCI-NCI will direct Magnolia Plumbing to furnish and install per revised engineering drawing and specification.

PKP-Note was revised to indicate ASTM B.

MKO/NCI-No Response

**COMMENT**      **RESPONSE**

1      PKP-Section 15130 was deleted under the FINAL submission. No pressure gages.

MKO/NCI-NCI will direct Magnolia Plumbing to response.

2      PKP-Section 15240 was edited under the FINAL submission.

3      PKP-Section 15530 was edited under the FINAL submission. Silver solder is required.

5      PKP-Section 15780 was edited under the FINAL submission. There is no reference for 50KW and larger equipment.

6      PKP-Per meeting of March 6, 1998 GSA directed to use specs "as is" in scope of work. Controls shown on drawings are for heat pump.

7      PKP-Drawing 9-M-1 was revised to reflect -18°C low ambient control. MKO/NCI-NCI will direct Magnolia Plumbing to revision and act accordingly.

- 8 PKP-Drawings were revised to incorporate copper drain pan.  
MKO/NCI-NCI will direct **Magnolia Plumbing** to revision and act accordingly.
- 9 PKP-Housekeeping pads have been indicated on drawings.  
MKO/NCI-NCI will furnish and install equipment pads as directed and direct **Magnolia Plumbing** to revision and act accordingly. NCI will revise work plans to incorporate per MKO work plans.
- 10 PKP-See 95% Review Comment Response MKO-NCI note response
- 11 PKP-See 95% Review Comment Response MKO-NCI note response
- 12 PKP-See 95% Review Comment Response MKO-NCI note response
- 13 PKP-See 95% Review Comment Response MKO-NCI note response
- 14 PKP-See 95% Review Comment Response MKO-NCI note response
- 15 PKP-See 95% Review Comment Response MKO-NCI note response

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE GS-11P87MKC7498"N"		PAGE OF PAGES 1   2	
2. AMENDMENT/MODIFICATION NO. One (1)		3. EFFECTIVE DATE 7/15/87		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable) RDC78042	
6. ISSUED BY General Services Administration, NCR Construction Contracts Branch (WQPC) GSA Regional Office Building, Room 2640 7th & D Streets, SW. Washington, DC 20407				7. ADMINISTERED BY (If other than Item 6) CODE			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)  ALL PROSPECTIVE OFFERORS				(V)			
				9A. AMENDMENT OF SOLICITATION NO. GS-11P87MKC7498 "NEG"			
				9B. DATED (SEE ITEM 11)			
				10A. MODIFICATION OF CONTRACT/ORDER NO.			
10B. DATED (SEE ITEM 13)							
CODE		FACILITY CODE					

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☒ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(V)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☒ is not, ☐ is required to sign this document and return \_\_\_\_\_ copies to the issuing office.


14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)  
SPECIFICATIONS - VOLUME I OF II

S-1: The following sections are added and made a part of the contract specifications:

Section 15310, Fire Protection Sprinkler System  
Section 16010, Electric, Basic Requirements  
Section 16050, Basic Wiring and Methods  
Section 16723, Fire Alarm System

DRAWINGS: The attached drawing Nos.FP-1 and E-1 dated 7-14-87, showing new fire pump with associated piping and controls, sprinkler deluge valve and requirements for

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
15B. CONTRACTOR/OFFEROR  (Signature of person authorized to sign)		16B. UNITED STATES OF AMERICA BY  (Signature of Contracting Officer)	
15C. DATE SIGNED		16C. DATE SIGNED 7-15-87	

Page 2

Amendment No. 1 to Contract GS-11P87MKC7498 "NEG" continued

provision of sprinkler system for cooling tower, are added and made a part of the contract documents.

END OF AMENDMENT NO. 1

Attachments: Sections 15310, 16010, 16050 and 16723  
Drawing Nos. FP-1 and E-1



## SECTION 15310

### FIRE PROTECTION SPRINKLER SYSTEM

1. **APPLICABLE PUBLICATIONS:** Unless otherwise indicated, the system, its specified components, their installation and operation shall conform to the applicable requirements of the following publications:

1.1 **National Fire Protection Association (NFPA):**

- |         |  |
|---------|--|
| No. 13  | Standard for the Installation of Sprinkler Systems       |
| No. 214 | Standard on Water Cooling Towers.                        |
| No. 20  | Standard for the Installation of Centrifugal Fire Pumps. |
| No. 70  | National Electrical Code                                 |

1.2 **Underwriters Laboratories (UL):**

Fire Protection Equipment Directory (January 1987.)

Building Material Directory (January 1987.)

1.3 **Factory Mutual Engineering Corporation (FM):**

Approval Guide 1986

1.4 **American National Standards Institute (ANSI):**

- |             |  |
|-------------|--|
| A 53.1-1979 | Safety Color Code for Marking Physical Hazards |
| A 14.3-1974 | Safety Requirements for Fixed Ladders          |

1.5 **American Society for Testing and Materials (ASTM):**

- |          |   |
|----------|---|
| E 84-77a | Surface Burning Characteristics of Building Materials |
| E 119-78 | Fire Tests of Building Construction and Materials     |

1.6 **Federal Specification (Fed. Spec.):**

- |          |                                   |
|----------|-----------------------------------|
| TT-P-86G | Paint, Red-Lead-Base, Ready Mixed |
|----------|-----------------------------------|

1.7 General Services Administration (GSA):

PBS P  
5900.2A

Accident and Fire Prevention-  
General

1.8 Acceptable evidence of compliance of devices and equipment, unless otherwise specifically indicated, is a UL listing or FM label, for its intended use, satisfactory to the Contracting Officer, that the devices and equipment meet the applicable standards. All devices and equipment shall be products being manufactured and having the required UL listing or FM label, for its intended use, at the date of bid opening.

2. DESCRIPTION:

2.1 This section of the specification includes the furnishing of all labor and materials for the installation of a hydraulically calculated cooling tower deluge system, complete in all respects and ready for operation for the New Executive Office Building. The system is subject to the requirements of Section, MECHANICAL EQUIPMENT, GENERAL. Design and installation of the sprinkler system shall be such that no parts interfere with doors, windows, heating, plumbing, air conditioning systems or electrical equipment.

2.2 The work shall be installed in accordance with the drawings, specifications and referenced publications. In case of conflict of requirements, the requirements in GSA Handbook PBS P 5900.2A shall govern.

2.3 Sprinkler heads shall be spaced, located, and positioned according to section 5-2.3 for crossflow towers of NFPA No. 214 piping sizes and configurations shall be on the basis of hydraulic calculations. Under the fan decks the rate of application of water shall be 0.33 gpm/square feet including fan opening. Over the fill areas the rate of application of water shall be 0.5 gpm/square feet.

2.4 Contractor shall obtain flow information from the following:

Bernard L. Gascon  
Chief Project Development Section  
Department of Public Works  
5000 Overload Avenue, SW  
Room 406  
Washington, D.C. 20032

Hydraulic calculations shall be based on a 78 psi static water pressure to the building.

3. SPECIALIST: Installation shall be by a specialist who is experienced in the installation of automatic sprinkler systems (minimum five years). Refer to Section SPECIAL CONDITIONS for additional specialist requirements.

4.                   HYDRAULIC CALCULATIONS: Hydraulic calculations shall be prepared in accordance with Chapter 7 of NFPA No. 13 with the following exceptions:

4.1                   Minimum operating pressure of any sprinkler shall be 15 psi.

4.2                   Pipe friction losses may be calculated by using the nearest foot for all piping over one foot in length. Horizontal lengths less than one foot may be neglected. Vertical lengths less than one foot shall be included for elevation purposes only.

4.3                   Flows shall be calculated to the nearest whole gallon.

4.4                   Velocity pressures may be neglected.

4.5                   Velocities in all piping shall not exceed 16 feet per second.

5.                   SUBMITTALS:

5.1                   Shop Drawings:

5.1.1               Detailed working drawings in accordance with Sections 1-9 and 7-2 of NFPA No. 13 shall be prepared and submitted to the Contracting Officer for approval prior to fabrication of piping. Hydraulic calculations shall be a part of this submittal. Partial submissions are not acceptable.

5.1.2               Catalog cuts of all essential equipment such as sprinkler heads, hangers and fittings shall be submitted for approval along with the working drawings.

5.1.3               A layout with sufficient detail to indicate the coordination of the location of sprinkler heads and piping with the cooling tower configuration shall be provided.

5.1.4               The submittal shall include a statement from the sprinkler contractor certifying that the design meets the hydraulic design parameters stated in this specification.

5.2                   As-Built Drawings:

5.2.1               Detailed as-built drawings shall be prepared and submitted to the Contracting Officer. The drawings shall indicate all information as required for working plans by Sections 1-9 and 7-2 of NFPA No. 13. The drawings shall also show the system as installed including all deviations from the approved shop drawings. The drawings shall be on uniform size sheets no smaller than 30 inches by 42 inches.

5.2.2               Five sets of as-built drawings shall be provided.

5.2.3 Final testing will be conducted only after receipt of the as-built drawings.

6. PIPE, VALVES, AND FITTINGS:

6.1 Piping shall be ferrous piping or copper tube listed in NFPA No. 13 Table 3-1.1.1 and in accordance with Section 3-1 of NFPA NO. 13.

6.1.1 All exterior piping shall be copper tube listed in NFPA. No. 13

6.2 All valves shall be suitable for 175 psi working water pressure.

6.3 Riser and sectional control valves shall be iron body, brass mounted approved OS&Y type.

6.4 Each control valve shall be provided with adequate means for mounting an electrical supervisory contact unit which is specified in Section 16723, FIRE ALARM SYSTEM.

6.5 Drainage and test valves shall be all-bronze, globe, angle or gate valves.

6.6 Check valves two inches and smaller shall be all-bronze with screw ends. Check valves 2-1/2 inches and larger shall be iron body, brass mounted with flange ends and non-ferrous metal set rings and bearings.

6.7 Fittings: Fittings shall be in accordance with Section 3-13 of NFPA No. 13 and suitable for 175 psi working pressure. Joining of pipe and fittings shall be in accordance with Section 3-12 of NFPA No. 13.

7. DELUGE VALVES: Deluge valves shall be UL listed Special System Water Control Valves Class I. Adequate means for mounting a deluge valve actuation device to operate each deluge valve shall be provided. In addition, each deluge valve shall actuate manually from a pull handle located at the valve. Deluge valve clappers shall incorporate a latching mechanism that will not be affected by changes in pressure of the water system. All valves shall be suitable for 175 psi working water pressure. If six inch valves are used in eight inch risers, smoothly tapered connections shall be provided. All necessary gauges, trimmings, and other appurtenances shall be provided for a standard approved unit. All equipment shall be UL listed, and installed in accordance with its listing and Section 5-3 of NFPA No. 13.

8. WATERFLOW DETECTORS: Waterflow detectors are included under Section 16723, FIRE ALARM SYSTEM, however adequate means for mounting these units shall be provided. Coordinate waterflow detectors with pipe sizes.

9. RELEASE SYSTEM: Provide a pneumatic release system to open deluge valve. Fixed temperature releases (pilot heads) shall have identical spacing to the spray nozzles in the cooling tower. Release system shall be manufacturers standard system, compatible with deluge valve and system provided.

10. CONTROL VALVE SUPERVISION: The OS&Y valve supervisory contact units, detectors and all conduit and wiring connected thereto, are included in Section 16723, FIRE ALARM SYSTEM of this specification.

11. FIRE PUMP SYSTEM:

11.1 Provide a fire pump system complete with fire pump, motor, controller, pressure maintenance pump (jockey pump), and accessories. The pumping system shall be listed by Underwriters Laboratories, Inc. and shall conform to all requirements of NFPA 20. See drawings for base bid and option bid items.

11.2 Pump shall be horizontal centrifugal split- case type. Pump shall be rated at 1000 gpm at 105 psi. Pumps shall furnish not less than 150 percent of rated capacity at not less than 65 percent of the total rated head. The shut-off head shall not exceed 120 percent of rated head. Split case pumps which are automatically controlled shall be provided with a listed float-operated air release not less than 1/2 inch in size, to automatically release air from the pump. Pressure gauges shall be installed on the suction and discharge sides of the pump in accordance with NFPA No. 20. An automatic circulation relief valve shall be provided. Pump shall be provided with a nameplate giving manufacturer's name, model number and pump discharge characteristics.

11.3 An electric motor shall be provided and shall be rated for continuous duty. Motors shall not be used at voltages in excess of 110 percent of rated voltage. Motor shall be non overloading at all points on pump curve.

11.4 Controller: All controllers shall be specifically listed for electric motor-driven fire pump service and installed in accordance with NFPA No. 20. Isolating means and circuit breaker shall be provided. A pilot power on lamp shall be provided. Supervisory signals shall be sent to the Fire Alarm System, Section 16721, to indicate either a motor running condition or loss of line power. Controller shall operate automatically and manually. A water pressure actuated switch having independent high and low calibrate adjustments responsible to the water pressure in the fire protection system shall be provided. Shutdown shall be accomplished manually and automatically.

11.5 Pressure Maintenance Pump (Jockey Pumps): Jockey pump shall be provided and shall have a rated capacity of 5 gpm and rated pressure of 50 psi. An electric motor and controller shall be provided.

12. Piping, General:

12.1 A test header shall be provided. The number and size of hose header valves and the header supply pipe size shall be in accordance with NFPA No. 20. Header shall be located three feet above grade. Hose valve threads shall be National Standard Fire Hose Thread type. Caps with chains shall be provided for each outlet. A ball drip valve shall be located in the pipe line to the hose header.

12.2 Relief valve shall be set to prevent pressure on the fire protection system in excess of that pressure which the system is capable of withstanding. Valve shall be installed in accordance with NFPA No. 20.

### 13. SLEEVES AND ESCUTCHEONS:

13.1 Pipe passing through walls, floors and partitions shall be provided with standard weight steel pipe sleeves. Sleeves through walls and finished spaces shall be flush. Where located in the floor construction the sleeves shall project not less than two inches above the floor line. Holes for pipe passing through floor slabs, walls or partitions with fire rated doors, corridor walls, and vertical service shafts shall be firestopped. Materials used for firestopping shall comply with the following as a minimum:

13.1.1 Be capable of preventing the passage of flame and hot gases sufficient to ignite cotton waste when subject to ASTM E 119 time-temperature fire conditions for two hours.

13.1.2 Flame Spread: 25 or less, ASTM E 84.

13.1.3 UL Classified Fill, Void, or Cavity material.

13.2 Provide escutcheons for pipes passing through walls, partitions and finished ceilings. Escutcheons shall be chrome plated steel.

### 14. INSTALLATION:

14.1 The waterflow device shall be installed on the discharge side of the deluge valve above the supervisory system check valve.

14.2 The deluge valve shall be fitted with an alarm bypass test connection in accordance with Section 3-17 of NFPA No. 13; so the waterflow device may be tested without opening of the deluge valve.

14.3 Provide all test and drain lines as required by Section 3-11 of NFPA No. 13. Pressure gauges, signs and other such standard appurtenances shall be furnished as required for a complete installation in accordance with NFPA No. 13. A nameplate data sign shall be provided at the main controlling valve to identify the system as a hydraulically designed system indicating the location and basis for design in accordance with Chapter 7 of NFPA No. 13.

14.4 All sprinkler piping shall be so installed that it can be thoroughly drained, and where practicable shall be arranged to drain at the main drain valve. The main drain valve shall be capable of a full discharge test without allowing water to flow onto the floor. All drips and drains shall conform to Section 3-11 of NFPA No. 13. All drain outlets discharging to the outside shall be located no higher than one foot above grade level.

14.5 Field changes in the piping layout or pipe sizes shall not be made without prior approval of the Contracting Officer.

14.6 Pipe supports, hangers, and clamps shall conform to and be placed in accordance with Section 3-15 of NFPA No. 13 and listed by Underwriters Laboratories, Inc., or approved by Factory Mutual.

14.7 Inspector's Test Valves shall be provided in accordance with Section 3-9 of NFPA No. 13, supplied from the highest and most remote part of the system in relation to the riser assembly, and shall discharge to the outside of the building or to a building drain. Test valves shall be conveniently accessible within seven feet of the floor.

14.8 Sterilization with a chlorinating material, approved by the Contracting Officer, shall be accomplished upon completion of the sprinkler installation and prior to placing the system in operation. The amount of chlorine applied shall be such as to provide a dosage of not less than 50 parts per million. The chlorinating materials shall be introduced into the water-supply lines and sprinkler systems in an approved manner. Following a contact period of not less than eight hours and not more than 12 hours, the chlorinated water shall be flushed from the system with clean water until the chlorine is not greater than 0.4 part per million. All valves in lines being sterilized shall be opened and closed several times during the eight hour period.

15. PAINTING: Exposed threads of all ferrous pipe shall be given one coat of corrosion resistant paint at the time of installation. After the system has passed all tests, all iron and steel parts shall be thoroughly cleaned. All piping and other metal that is exposed, except sprinkler heads, bronze, chrome or brass fittings, and moving parts shall be given a priming coat of red lead type paint conforming to Fed. Spec. TT-P-86G. A finish coat shall meet ANSI Z 53.1 and be federal safety red conforming to OSHA color coding. Concealed piping shall have four inch wide red painted bands placed at most every ten feet on center.

16. TESTING: Sprinkler systems shall be hydrostatically tested by the Contractor upon completion of the installation as required by Section 1-11.2 of NFPA No. 13 in the presence of the Contracting Officer or his designated representative. When hydrostatic and alarm tests have been completed and all necessary corrections made, the Contracting Officer shall be advised so as to permit final inspection and testing. At the final inspection, a material and test certification shall be provided in accordance with Section 1-12

of NFPA No. 13. The final tests shall be witnessed by a member of the GSA Regional Accident and Fire Prevention Branch. Final inspection shall include full flow testing through both the main drain and the inspector's test connection. Water shall flow out of the inspector's test connection within one minute after simultaneous opening of the deluge valve and the inspector's test valve. Equipment in areas being tested (during hydrostatic and final testing) shall be covered with polyethylene sheets to protect from accidental spilling of water.

END OF SECTION



## SECTION 16010

### ELECTRICAL BASIC REQUIREMENTS

#### PART 1 - GENERAL

##### 1.1 WORK INCLUDED IN THIS SECTION:

1.1.1 This section of the specification applies to the furnishing and installation of electrical materials as specified in the following electrical sections.

1.1.2 The work includes, but is not limited to, the installation and connection of fire pump, fire pump controller, jockey pump, and the service to that equipment:

##### 1.2 GENERAL REQUIREMENTS:

1.2.1 The Contractor shall submit proof, if requested by the Contracting Officer, that the materials, appliances, equipment or devices that he furnishes and installs under this contract, meet the requirements of all applicable Underwriters Laboratories (UL) Standards. The label of, or listing by, Underwriters Laboratories will be accepted as conformance with this requirement. In lieu of the label or listing, the Contractor may submit reports, done by testing agencies satisfactory to the Contracting Officer, indicating that the materials, appliances, or devices conform to the published standards, including methods of test, of Underwriters Laboratories.

1.2.2 The National Electrical Code (NEC) of the National Fire Protection Association (NFPA) shall apply to all electrical work in this project.

1.2.3 Appliances, equipment, and fixtures shall be current models for which replacement parts are available. Materials and equipment delivered to the site shall be stored and protected in such a manner as to effectively prevent damage from climatic conditions, condensation, dust, and physical abuse. Materials and equipment shall be installed and connected in accordance with manufacturer's instructions and recommendations. Each major component of equipment shall have the manufacturer's name, address, model number, and ratings on a plate securely affixed in a conspicuous place.

1.2.4 Conduits, wiring and equipment shall be arranged generally as indicated. Any change resulting in a savings in labor or materials shall be made only in accordance with a contract change order. Deviations shall be made only where necessary to avoid interferences and only after drawings showing the proposed deviations have been submitted to and approved by the Contracting Officer.

1.2.5 Drawings other than electrical drawings, and other sections of this specification may show or specify electrically operated equipment and wiring diagrams. All such drawings and specification sections shall be examined and characteristics of the required connections for all equipment for which wiring is to be provided shall be noted.

1.2.6 The motor horsepower and apparatus wattage ratings shown on drawings or specified herein are estimated values, and the corresponding sizes of feeders and other electrical equipment indicated to serve them are minimum sizes. Motors of greater horsepower and apparatus with larger wattage ratings may be furnished if necessary to meet the requirements of the various sections of the specification in which they are specified. Where larger motors or apparatus with larger wattage ratings are furnished, the feeders and other electrical equipment serving them shall be increased in capacity to correspond. The increase in the capacity of the feeder and other apparatus shall be furnished at no additional cost to the Government in each case in which the Contracting Officer determines that apparatus meeting the specification requirements and requiring a horsepower or wattage not exceeding that listed is available from two or more sources.

1.2.7 Electrical welders used in the erection and fabrication of the building and its equipment shall be provided with an independent grounding cable connected directly to the structure on which the weld is being made rather than to adjacent conduit or piping.

### 1.3 SUBMITTALS:

1.3.1 Submit shop drawings and catalog data within 30 days after the receipt of notice to proceed.

1.3.2 Submit shop drawings for each item and system listed below for which shop drawings are required elsewhere except where the information is included with manufacturers catalog data. Shop drawings shall show the ratings of items and systems and how the components of an item and system are assembled, function together and how they will be installed on the project. Data and shop drawings for component parts of an item or system shall be coordinated and submitted as a unit. Data and shop drawings shall be included in a single submission. Multiple submissions are not acceptable except where prior approval has been obtained from the Contracting Officer. In such cases, a list of data to be submitted later shall be included with the first submission.

1.3.3 Data and shop drawings shall be identified in accordance with section, "General Conditions". Shop drawings shall be identified by the name of the item and system and the applicable specifications paragraph number.

1.3.3.1 Catalog data shall be submitted for:

Mineral insulated cable

Mineral insulated cable fittings and connectors

Fire pump controller

Motor circuit protector circuit breaker

Wires and Cables

Motors

1.3.3.3 No item and system listed above shall be delivered to the site, or installed, until approved. After the proposed materials have been approved, no substitution shall be permitted except where approved by the Contracting Officer.

1.3.4 Should the Contractor fail to comply with the requirements of paragraph SUBMITTALS, the Government reserves the right to select its own choice of any or all items and systems listed in paragraph 1.3.3. Section shall be final and binding upon the Contractor. Materials so selected or approved shall be used in the work at no additional cost to the Government.

1.3.5 Unless otherwise provided, all items used shall be substantially the same as items of manufacture which, on the date of opening of bids, have been in successful commercial use and operation for not less than one year in projects and units of comparable size. The right is reserved by the Contracting Officer to require the Contractor to submit a list of buildings where specified items have been in operation, so that such investigation as may be deemed necessary may be made before approval.

#### 1.4 MANUALS:

1.4.1 In addition to and after approval of data and shop drawings, furnish to the Contracting Officer three copies of operation and maintenance manuals consisting of corrected copies of all catalog data, shop drawings, performance curves and rating data, applicable to the equipment furnished. Deliver all such material a minimum of 90 days before the start of operation by the Government.

#### 1.5 COORDINATION:

1.5.1 Coordinate the work of the different trades so that:

(1) Interferences between mechanical, electrical, architectural, and structural work, including existing services shall be avoided; and

(2) Within the limits indicated on the drawings, the maximum practicable space for operation, repair, removal, and testing of electrical equipment shall be provided.

1.5.2 All electrical materials and equipment shall be kept close as possible to ceiling, walls and columns, to take up a minimum amount of space.

1.5.3 Furnish and install all offsets, fittings and similar items necessary in order to accomplish the requirements of coordination without additional expense to the Government.

## **PART 2 - PRODUCTS**

2.1 **MECHANICAL EQUIPMENT REQUIREMENTS:** The electrical components of mechanical equipment such as motors, motor starters, control or pushbutton stations, float-or pressure-switches, solenoid valves, and other devices functioning to control associated mechanical equipment are specified in the appropriate sections covering such work. Interconnecting wiring for components of packaged equipment shall be provided as an integral part of the equipment as specified elsewhere in the appropriate sections covering such work.

## **PART 3 - EXECUTION**

### **3.1 PAINTING AND FINISHING:**

3.1.1 Factory finishes, shop priming, and special protective coatings are specified in the individual sections.

3.1.2 Where factory finishes are provided on equipment and no additional field painting is specified, all marred or damaged surfaces shall be touched up or refinished so as to leave a smooth, uniform finish at the time of final inspection.

### **3.2 SUPPORT OF ELECTRICAL ITEMS:**

3.2.1 Unless otherwise indicated, all electrical items and their supporting hardware, including but not limited to, conduits, raceways, cabinets, boxes, and disconnect switches, shall be securely fastened to the building structure with the following methods. Fastening shall be done by wood screws or screw-type nails on wood; by toggle bolts on hollow masonry units; by concrete inserts or expansion bolts on concrete or brick; by machine screws, welded threaded studs, or spring-tension clamps on steel work. Threaded C-clamps with retainers may be used on rigid steel conduit only. Conduits or pipe straps shall not be welded to steel structures.

3.2.2 The load applied to any fastener shall not exceed one-fifth of the proof test load. Fasteners attached to concrete ceilings shall be vibration and shock-resistant.

3.3 **REPAIR OF EXISTING WORK:** The work shall be carefully laid out in advance, and where cutting, channeling, chasing, or drilling of floors, walls, partitions, ceilings, or other surfaces is necessary for the proper installation, support, or anchorage of the conduit, raceways, or other electrical work, this work shall be carefully done, and any damage to the building, piping, or equipment

shall be repaired by skilled mechanics of the trades involved at no additional cost to the Government.

### **3.4 CLOSING OF OPENINGS:**

**3.4.1** Wherever slots, sleeves or other openings are provided in walls, for the passage of conduits or other forms of raceway, such openings, if unused, or the spaces left in such openings after installation of the conduit or raceway shall be filled.

**3.4.2** Filling materials for openings in walls generally shall be fire-resistive and constructed and installed so as to prevent passage of water, smoke and fumes. Materials and installation shall conform to the requirements of the "Firestopping" section.

**3.4.3** Where conduits passing through the openings are exposed in finished rooms, the finishes of the filling materials shall match and be flush with the adjoining floor, ceiling or wall finishes.

**3.5 TESTS:** Feeders shall have their insulation tested after installation, and before connection. Tests shall be performed with a 500-volt megger, and conductors shall test free from short-circuits and grounds. Conductors shall be tested phase-to-phase and phase-to-ground. Motors shall be meggered after installation but before start-up, and shall test free from grounds. The Contractor shall furnish the instruments, materials, and labor, and the tests shall be performed in the presence of the Contracting Officer. Test readings shall be recorded and delivered to the Contracting Officer.

**END OF SECTION**

## SECTION 16050

### BASIC WIRING AND METHODS

#### 1. GENERAL:

1.1 Unless otherwise noted, all wiring shall be installed in rigid metal conduit, conduit specified below or as indicated on the drawings. Surface metal raceways shall not be used definitely shown on the drawings. Fibrous nonmetallic tubing (loom), nonmetallic sheathed cable, and armored cable (Bx or Type AC) shall not be used.

1.2 All wiring shall be furnished and installed complete from point of service connection to utilization equipment as indicated on drawings. Ample slack wire shall be provided for connections.

1.3 Cables shall not be bent, either permanently or temporarily during installation, to radii less than 10 times the outer diameters, except where shorter radii are approved by the Contracting Officer for conditions making the specified radius impracticable.

1.4 All conductors located in switchboards, motor controllers and pull boxes shall be neatly and securely cabled in individual circuits. Cabling shall be done with nylon straps made of self-extinguishing nylon having a temperature range of -65 degrees F. to +350 degrees F. Each strap shall be constructed with a locking hub or head on one end and a taper on the other.

#### 2. MOTOR CIRCUIT WIRING:

2. Mount and align all starters, control devices, and other related electrical equipment whether specified in this or other sections of this specification, except where such items are factory mounted on the driven equipment.

2.2 Furnish all wiring, including conduit, wire, junction boxes, disconnecting switches and overcurrent protection devices not specified elsewhere in this specification, to and between all motors, starters, control devices and related electrical equipment whether specified in this or other sections of this specification, except where such items are factory wired as well as factory mounted on the driven equipment.

2.3 All wiring to motors, control equipment and related electrical equipment shall be run in rigid metal conduit, with flexible metal conduit connections or liquid-tight flexible connections where required. Conduits shall be large enough to accommodate motor branch circuits and grounding conductors whether or not so indicated on

drawings. Wire sizes shall be as shown, or, if not shown, as required by the NEC.

### 3. CONDUIT AND FITTINGS;

3.1 Threaded steel conduit shall be in accordance with Fed. Spec. WW-C-581E. Conduit shall be zinc-coated on the outside and shall be either zinc-coated or coated with an approved corrosion-resistant coating on the inside.

3.2 Flexible metal conduit (commercial Greenfield) shall be in accordance with Fed. Spec. WW-C-566C.

3.3 Fittings for threaded steel conduit shall be in accordance with Fed. Spec. W-F-408C, except that the material shall be either iron or steel.

3.4 Bushings for threaded steel conduit shall be of the insulated type, designed to prevent abrasion of wires without impairing the continuity of the conduit grounding system. The insulating insert shall be made of thermosetting or fiber material which conforms to the flame test requirements of UL 514, molded or locked into the metallic body of the fitting. Conduit bushings made entirely of nonmetallic material shall not be used.

3.5 Fittings for flexible metal conduit shall be in accordance with Fed. Spec. W-F-406B. Fitting shall be made of steel or malleable iron and shall be of one of the following types:

(1) Wedge and screw type having an angular wedge fitting between the convolutions of the conduit.

(2) Squeeze or clamp type having a bearing surface contoured to wrap around the conduit and clamped by one or more screws.

(3) Steel, multiple point type, for threading into internal wall of the conduit convolutions

3.6 Flexible conduits shall be used for connections to motors and other electrical equipment when it is subject to movement, vibration, misalignment, cramped quarters or where noise transmission is to be eliminated or reduces.

3.7 Exposed conduits shall be run parallel to or at right angles to the lines of the building. All bends shall be free from dents or flattening.

3.8 Conduit runs shall be mechanically and electrically continuous from service entrance to all outlets. Unless otherwise specified, each conduit shall enter and be securely connected to a cabinet, junction box, pull box or outlet box by means of a locknut on the outside and a bushing on the inside or by means of a liquid-tight, threaded self-locking, cold-weld type wedge adapter. Where nominal circuit voltage exceeds 250 volts, an additional locknut shall be

provided, one locknut being inside and one locknut outside and in flexible metal conduit, the one locknut shall be made wrench-tight. All locknuts shall be the bonding type with sharp edges for digging into the metal wall of an enclosure and shall be installed in manner that will assure a locking installation. Locknuts will not be required where conduits are screwed into tapped connections.

3.9 The minimum size of threaded conduit, and flexible metallic conduit shall be in accordance with the NEC but shall not be less than the size shown on the drawings whenever such sizes are shown.

3.10 The size of all raceways shall be checked to determine that the green equipment ground conductor, specified, shown, or required can be installed in the same raceway with phase conductors in accordance with the percentage of fill requirements of NEC. If necessary, sizes of conduit, shown or specified shall be increased to accommodate all conductors without additional cost to the Government.

3.11 Unless otherwise specified or shown on the drawings, all conduit shall be installed concealed. Conduit may be run exposed on unfinished walls, unfurred basement, ceilings, in switchgear rooms and pump rooms.

3.12 Every conduit system shall be installed complete before any conductors are drawn in. Each run of conduit shall be blown through before conductors are installed.

#### 4. CONDUIT SUPPORTS:

4.1 Pipe straps shall be Type 1, Style A or Style B, in accordance with Fed. Spec. FF-S-760A.

4.2 Individual pipe hangers, and all parts and hardware shall be zinc-coated throughout. All U-bolts, clamps, attachments, and other hardware necessary for hanger assembly, and for securing hanger rods and conduits shall be provided.

4.3 Pipe straps and hanger rods shall be fastened to surfaces as specified under "Support of Electrical Items" paragraph in the "ELECTRICAL, GENERAL PROVISIONS" section.

4.4 All conduits shall be securely and independently supported so that no strain will be transmitted to pull box supports. Supports shall be rigid enough to prevent distortion of conduits during wire pulling.

4.5 Individual horizontal conduits shall be supported by one-hole pipe straps or separate pipe hangers for sizes 1-1/2-inch and smaller, and by separate pipe hangers for larger sizes. Wire shall not be used as a means of support.

4.6 Branch circuit conduits above suspended ceilings may be supported from the floor construction above or from the main ceiling support members.



**5. WIRES AND CABLES:**

**5.1 General:**

**5.1.1** Unless otherwise indicated or specified, wires or cables shall be rated for 600 volts minimum.

**5.1.2** Unless otherwise specified, all wires and cables for secondary service, feeders, and branch circuits (except MI cable) shall be of the single conductor annealed copper type, and shall be in accordance with Fed. Spec. J-C-30A.

**5.1.3** Unless otherwise specified, indicated on the drawings, or higher rating is required by the NEC, conductors shall have at least 90 degree C. rated insulation.

**5.2 Mineral Insulated:** Conductors, where indicated on the drawings, shall be of the mineral-insulated, metal-sheathed cable. Cable shall be either single conductor or multi-conductor, with a highly compressed refractory Magnesium Oxide mineral insulation encased in a continuous copper sheath. Cable shall be installed in strict accordance with manufacturer's instructions. Cables supplied under this contract shall be UL classified as having a two hour fire rating.

**5.2.1** Support cable at not more than 5-feet intervals, by means of straps, hangers or other fittings specifically designed for the purpose.

**5.2.2** At termination points provide cable with an approved seal immediately after stripping to prevent entrance of moisture into the mineral insulation. Encase conductors beyond the sheath in a recommended type insulating sleeve.

**5.2.3** When mineral insulated cable is connected to boxes or other equipment. Provide factory fabricated fittings suitable for the service conditions. Fittings shall be of the threaded-gland type with "Screw-on pot" seals filled with an insulating compound designed for the atmospheric and service conditions in which the cable is used.

**5.2.4** Stripping of cable ends, installation of fittings, application of insulating compound, and actual cable terminations shall be made according to manufacturer's specific instructions.

**5.3 Splices and Terminations:**

**5.3.1** Terminations or splices for stranded conductors No. 6 and larger shall utilize indent, hex screw, or bolt clamp-type connectors, with or without tongue, as approved by the Contracting Officer for the particular application. Connectors shall have not less than two clamping elements or compression indents. All wire and cable connectors shall be of high conductivity corrosion-resistant material, and have ampere capacity which must at least equal solderless connections and must also conform to Fed. Spec. W-S-610C.

5.3.2 All insulating materials for splices and connections such as rubber, friction, varnished cambric, asbestos, glass and synthetic tapes, putties, resins, splice cases, or compositions shall be of the type approved for the particular use, location, and voltage and shall be applied and installed in an approved manner, all in accordance with the manufacturer's and the Contracting Officer's recommendations.

5.3.3 Plastic electrical insulating tape for use in lieu of rubber and friction tape shall conform to Fed. Spec. HH-I-595C and shall be flame retardant.

5.3.4 Rubber electrical insulating tape shall be noncorrosive to copper, self-fusing and have a minimum of 350 volts per mil dielectric strength and shall further meet the requirements of Fed. Spec. HH-I-553B.

5.3.5 All terminals and connectors shall be torqued at least to the minimum values listed in Underwriters Laboratories Standard UL 486.

5.4 Color Coding:

5.4.1 Feeder conductors shall be color coded as follows:

Phase 480y/277 Volts

A Yellow

B Brown

C Orange

Neutral White

Ground Green

The colors shall be factory-applied entire length of the conductors by solid color compound or solid color coating.

5.4.2 The solid color coating, shall be strongly adherent paint or dye not injurious to the insulation which will not be obliterated by pulling into a conduit or raceway.

5.5 Wire Pulling:

5.5.1 Suitable installation equipment shall be provided to prevent cutting and abrasion of conduits during the pulling of feeders. Ropes used for pulling of feeders shall be made of polyethylene or other suitable nonmetallic material. Metallic ropes shall not be used.

5.5.2 Wire pulling lubricants, if used, shall conform to UL requirements applicable to the insulation and raceway materials used.

5.5.3 Pulling lines shall be attached to conductor cables by means of either woven basket grips or pulling eyes attached directly to the conductors, as approved by the Contracting Officer. Rope hitches shall not be used. All cables to be installed in a single conduit shall be pulled in together.

6. JUNCTION BOXES: All junction boxes shall be installed so that covers are accessible after completion of the installation. Junction boxes shall not be installed above suspended ceilings, except where the ceiling is of the removable type or definite provision is made for access at a point close to each box.

7. PULL BOXES:

7.1 Pull boxes shall conform to the applicable requirements of the NEC and boxes over 100 cubic inches in volume shall also conform to UL 50, except as modified below. Sheet metal boxes shall be adequately supported to maintain shape. Larger boxes shall be adequately formed of structural steel bracing welded into a rigid assembly shall be provided to maintain alignment in shipment and installation. Covers shall be secured by corrosion-resistant screws and bolts.

7.2 Pull boxes shall be not smaller than 8 inches square by 4 inches deep.

8 Motor circuit Protectors: Circuit breakers shall be rated for the voltage of the circuit on which they are used. Circuit breakers shall have a minimum interrupting rating of 22,000 amperes symmetrical, unless a greater rating is shown on the drawings. Breakers shall have a common trip mechanism. Breakers shall be quick-make, quick-break, magnetic type and shall be trip-free. Devices with adjustable magnetic trip shall be factory set to the "low" value which shall allow for at least 7 times the full load current of the fire pump.

9. GROUNDING:

9.1 The grounded neutral of the secondary distribution system shall be supplemented by an equipment grounding system to properly safeguard equipment and personnel. The equipment grounding system shall be designed so all metallic structures, enclosures, raceways, junction boxes, outlet boxes, cabinets, machine frames, portable equipment and other conductive items in close proximity with electrical circuits operate continuously at ground potential and provide a low impedance path for possible ground fault currents. The system shall comply with the National Electrical Code, as hereinafter specified.

9.2 Low voltage distribution systems shall be provided with a separate green insulated equipment grounding conductor for each three-phase feeder with a three-phase protective device. The required grounding conductor shall be installed in the common conduit with the related phase.

9.3 The completed equipment grounding system shall be subjected to a megger test at each ground bar to insure that the ground resistance, without chemical treatment or other artificial means, does not exceed five (5) ohms. Certified test reports of the ground resistance shall be submitted to the Contracting Officer for approval. Necessary modifications for compliance with the five (5) ohm value should be reflected in the contract price without additional expense to the Government.

9.4 Where conduits terminate without locknuts and bushings or other mechanical connection to a metallic housing of electrical equipment. Each conduit shall be provided with a ground bushing and each bushing connecting with a bare copper conductor to the ground bus in the electrical equipment. The ground conductor shall be in accordance with the article on Grounding of NEC. Electrically non-continuous metallic conduits containing ground wiring only shall be bonded to the ground wire at both conduit entrance and exit in a manner similar to that described above.

END OF SECTION

## SECTION 16723

### FIRE ALARM SYSTEM

1. APPLICABLE PUBLICATIONS: Unless otherwise indicated, the system, its specified components, their installation and operation shall conform to the applicable requirements of the following publications:

1.1. National Fire Protection Association (NFPA):

No. 70-1984 National Electrical Code

No. 72A-1985 Standard for the Installation,  
Maintenance and Use of Local  
Protective Signaling Systems for  
Guard's Tour, Fire Alarm and  
Supervisory Service

No. 101-1985 Life Safety Code

1.2 Underwriters Laboratories (UL):

Fire Protection Equipment Directory  
(January 1986)

Electrical Construction Materials Directory  
(May 1985)

Building Materials Directory (January 1986)

1.3 Factory Mutual Engineering Corporation (FM):

Approval Guide 1986

1.4 General Service Administration (GSA):

PBS P 5900.2B, Accident and Fire  
Prevention-General

1.5 Acceptable evidence of devices and equipment, unless otherwise specifically indicated, is a UL listing or FM label, for its intended use, satisfactory to the Contracting Officer, that the devices and equipment meet the applicable standards. All devices and equipment shall be products being manufactured and having the required UL listing or FM label, for its intended use, at the date of bid opening.

2. DESCRIPTION:

2.1 This section of the specification includes the installation of a fire pump and cooling tower fire protection as described herein and shown on the drawings for the New Executive Office Building, Washington, D.C. Multiplex or addressable type systems which use a common circuit for multiple signals shall not be installed under this contract. The alarm system modifications shall include sprinkler valve supervision, and fire pump supervision.

2.2 The system shall include all wiring; raceways; pull boxes; terminal cabinets; outlet and mounting boxes; control equipment; alarm, pre-alarm, and supervisory signal initiating devices; alarm indicating devices; and all other accessories and miscellaneous items required for an operating system even though each item is not specifically mentioned or described.

2.3 The system shall be installed in accordance with the drawings, specifications and referenced publications. In case of conflict of requirements, the requirements in GSA Handbook PBS P 5900.2B shall govern.

2.4 Existing fire alarm equipment is to remain fully operational until the new equipment has been tested and accepted by the Government. As new equipment is installed, it shall be labeled "NOT-IN-SERVICE" until the new equipment is accepted. Once the new system is complete, tested, and accepted it shall be placed in service.

### 3. QUALITY ASSURANCE:

3.1 Installation shall be accomplished by an electrical contractor with a minimum of five years experience in the installation of fire alarm systems. The Contracting Officer may reject any proposed installer who cannot show evidence of such qualifications. The services of a technician provided by the control equipment manufacturer shall be provided to supervise installation, adjustments and tests of the system.

3.2 The Contractor shall furnish evidence that there is an experienced and effective service organization which carries a stock of repair parts for the system to be furnished. The Contractor shall guarantee labor, materials and equipment provided under this contract against defects for a period of one year after the date of final acceptance of this work by the Government and the receipt of as built drawings and schematics of all equipment. Repair and/or replacement parts for the system to be furnished shall be available for a period of ten years after the date of final acceptance of this work by the Government. Service during the guarantee period shall be provided within two hours after notification and all repairs shall be affected within twenty four hours after notification. Should the Contractor fail to comply with the above requirements, the Government will then have the option to make the necessary repairs and back charge the Contractor without any loss of warranty or guarantee as provided by the Contract documents.

### 4. DEFINITIONS:

4.1 Fire Alarm Signal: A signal which signifies a state of emergency requiring immediate action such as an alarm for fire from a manual station or a suppression system switch; and requires immediate notification of the fire department.

4.2 Supervisory Signal: A signal which signifies an impairment of a fire protection system which may prevent its normal operation.

4.3 Trouble Signal: A signal which signifies that a fault, such as an open circuit or ground, has occurred in the system.

4.4 Point Wired System: A system where alarm initiating, pre-alarm initiating, and/or supervisory signal initiating devices are directly connected to a central control panel via multiple conduction paths (initiating device circuits), without multiplexing, to initiate the specified response.

4.5 Fire Alarm Zone: Any fire alarm initiating device or combination of devices connected to a single fire alarm initiating device circuit.

4.6 Supervisory Zone: Any supervisory signal initiating device or combination of devices connected to a single supervisory signal initiating device circuit.

4.7 Communication Zone: Any fire alarm indication device or series of devices arranged visually and/or audible indicate a fire alarm signal.

4.8 Class A Operation: A circuit that is electrically supervised such that a single break or a single ground fault condition will be indicated by a trouble signal on the Fire Alarm Control Panel, and is capable of operation for its intended service during the single break or single ground fault condition, no matter where the break or ground fault occurs.

4.9 Class B Operation: A circuit that is electrically supervised such that a single break or single ground fault condition will be indicated by a trouble signal on the Fire Alarm Control Panel no matter where the break or ground fault condition occurs.

## 5. SYSTEM OPERATION:

5.1 All fire alarm system circuits shall be electrically supervised.

5.2 Automatic response functions shall be initiated only by the first fire alarm received and annunciated, but a second alarm shall not initiate the automatic functions unless the first fire alarm zone is returned to normal.

5.2.1 The operation of a waterflow switch shall:

a) initiate the operation of an existing relay to transmit a suppression alarm signal to the existing central station transmitter.

b) cause an indication of the device location by device type, by zone and by floor on the exist. Fire alarm control panel and on the exist. graphic annunciator.

c) cause an audible alarm signal at the exist. FACP.

d) transmit audible and visual signals to all floors of the building through existing devices.

e) record all events on the existing system printer.

5.2.2 Operation of automatic sprinkler system control valve tampers shall:

a) initiate the operation of an existing relay to transmit a valve tamper supervisory signal to the existing central station transmitter.

b) cause an indication of the device location by device type, by zone and by floor on the existing FACP and on the existing graphic annunciator.

c) cause an audible supervisory signal at the existing FACP.

d) record all events on the existing system printer.

5.3 The maximum time period from actuation of any initiating device until its indication on the FACP shall be ten seconds.

5.4 The waterflow switch input functions (using supervised normally open contacts) shall be indicated and the building fire alarm evacuation system shall be initiated as herein-before described.

5.5 The following input functions (using supervised normally open contacts) shall be indicated and shall cause a supervisory signal to sound at the fire alarm control panel:

a. Control valve tamper switch

## 6. ELECTRICAL SUPERVISION:

6.1 Supervision shall be in accordance with NFPA No. 72A and the minimum requirement listed below: All wiring shall be Class A.



6.2 The circuits listed below shall be supervised so a single break or a single ground fault condition will be indicated by zone with a trouble signal on the FACP:

a. Alarm, and supervisory signal initiating device circuits from the FACP to the initiating devices.

b. Alarm notification circuits from the FACP to the central station service transmitter relays.

c. Annunciator circuits from the FACP to the graphic annunciator.

d. A break or ground fault condition on the circuits listed above shall be indicated by zone with a trouble signal on the FACP and shall transmit a system trouble (trouble signal) to the existing building fire alarm system via an existing relay

7. SUBMITTALS:

7.1 Shop Drawings:

7.1.1 Shop drawings shall be submitted to the Contracting Officer within 30 days of the notice to proceed for approval prior to installation. The submittal shall be a complete set. Partial submittals will not be acceptable. Six copies of the shop drawings shall be submitted.

7.1.2 The submittal shall include complete schematic circuit diagrams for all equipment including panel modules; wiring diagrams showing connections between all system components, both field and panel wiring; description of system operation; annunciator schedule showing titles for each fire alarm, pre-alarm, and supervisory signal zone; detailed drawings of the graphic annunciator; and manufacturer's literature marked to show model and catalog number for all equipment.

7.1.3 The submittal shall also include complete floor plans showing the location of all devices and equipment in accordance with Section 1.2 of NFPA No. 72A. In addition, complete riser diagrams (with color code schedule) indicating wiring sequence of all devices and control equipment shall be submitted.

7.1.4 Electrical drawings shall not be on less than 8-inch by 10-1/2-inch sheets and shall identify all symbols used. The complete schematic shall be on a single sheet drawing with all circuit terminals and interconnections identified.

7.2 Instruction Manuals: Prior to final acceptance testing of the entire system and for use during instruction periods, the Contracting Officer shall be furnished five bound copies of operation and maintenance manuals including an index, copies of all approved shop drawing submittal materials, except that diagrams and drawings shall be as-built, and a complete parts list. A spare parts list shall also be

provided that indicates manufacturer's name, serial number, order number, size, and operating characteristics.

### 7.3 As-Built Drawings:

7.3.1 Detailed as-built drawings shall be prepared and submitted to the Contracting Officer. The drawings shall include wiring diagrams showing connections between all devices and equipment, both panel and field wiring, riser diagrams, and indicating the locations of all devices and equipment. The drawings shall also show the system as installed including all deviations from the approved shop drawings. The drawings shall be on uniform size sheets no smaller than 30 inches by 42 inches.

7.3.2 Five sets of as-built drawings shall be provided.

7.4 Final acceptance tests by the Contracting Officer will be made only after receipt of the as-built drawings and instruction manuals.

### 8. ALARM INITIATING DEVICES:

8.1 Disconnection of any single alarm initiating device shall cause a trouble signal at the FACP, but shall not inhibit the operation of any other initiating device.

### 9. SUPERVISORY SIGNAL INITIATING DEVICES:

9.1 Disconnection of any single supervisory signal initiating device shall cause a trouble signal at the existing FACP, but shall not inhibit the operation of any other initiating device.

9.2 Tamper Switch: Each sprinkler system control valve shall be equipped with a tamper switch; UL listed Extinguishing system Attachment for the particular location and type of valve supervised. The device shall contain double pole, double throw contacts. The switch shall initiate a supervisory signal upon a maximum of two complete turns of the valve wheel or closure of ten percent, whichever is less.

### 10. CONTROL EQUIPMENT:

10.1 Terminate all wiring adjacent to the existing Fire Alarm Control Panel (FACP) in the guards office on the ground floor where shown. Final connections shall be made by Government personnel.

### 11. INSTALLATION:

11.1 Each fire alarm and supervisory signal initiating device circuit shall be wired for Class A operation.

11.2 Each fire alarm indicating device circuit shall be wired for Class A operation.

11.3           Wiring Within Component Enclosures and Terminal Cabinets: All wiring shall be installed in a neat and workmanlike manner and shall be trained parallel with or at right angles to the sides and back of any enclosure or cabinet. All circuit conductors broken, spliced, or connected in any enclosure, cabinet, mounting or junction box shall be connected to terminal blocks with each terminal marked in accordance with the wiring diagram for identification. Connections shall be made with either crimp-on terminal spade lugs or with approved pressure type terminal blocks. A terminal cabinet shall be installed where any circuit tap is made. All wiring within the enclosure shall be readily accessible without removing any component parts.

11.4           System Field Wiring: Field wiring shall be solid copper minimum No. 14 AWG size conductors. All conductors shall be installed in rigid metal conduit run concealed except where noted. Each conductor used for the same specific function shall be distinctively color coded. Two different color codes shall be used for initiating device circuits. Two separate colors shall be used for the alarm indicating circuits. Wiring for the fire systems shall be installed as herein described and separate from any other wiring systems.

11.5           Firestopping: Holes for conduit passing through floor slabs, walls or partitions with fire rated doors, corridor walls, and vertical service shafts shall be firestopped in accordance with NFPA No. 70. Materials used for firestopping shall comply with the following as a minimum:

11.5.1           Be capable of preventing the passage of flame and hot gasses sufficient to ignite cotton waste when subject to ASTM E 119 time-temperature fire conditions for two hours for wall penetrations and four hours for floor penetrations.

11.5.2           Flame Spread: 25 or less, ASTM E 84.

11.5.3           UL Classified Fill, Void, or Cavity Material.

12.           TESTS:

12.1           All testing shall be coordinated with and approved by the Contracting Officer. A letter certifying that the installation is complete and fully operable shall be forwarded to the Contracting Officer. The letter shall include the names and titles of witnesses of the preliminary tests. The Contractor and an authorized representative from each supplier of equipment shall be in attendance to make necessary adjustments related to the testing. The final tests shall be witnessed by a member of the GSA Regional Accident and Fire Prevention Branch.

12.2           As minimum requirements, the system shall be tested in accordance with the requirements of Chapters 2 and 4 of NFPA No. 72H; Chapter 8 of NFPA No. 72E; and in addition to show that:

a. The complete system is free from grounded or open circuits.

b. Each fire alarm, and supervisory signal initiating device functions as specified and produces the specified actions.

c. Abnormal condition of any circuit or device required to be electrically supervised shall result in the specified trouble signals.

d. Each alarm indicating device functions as specified.

e. The system is operable under the specified trouble conditions.

END OF SECTION



8950 Route 108, Suite 100, Columbia, Maryland 21045

Tel: (410) 997-4458

Fax: (410) 997-8713

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December 16, 2002

Ms. Debra Washington  
General Services Administration, NCR, Service Delivery Support  
Safety, Env. & Fire  
7<sup>th</sup> & D Streets, SW, Room 2080  
Washington, DC 20407

**RE: Fiber in Air (FIA) Sampling, New Executive Office Building, Washington, DC  
Order Number P-11-02-DC-0291; ACT Number P14576038;**

Dear Ms. Washington:

In accordance with contract number GS11P01MQD0055, Tidewater, Inc. performed a fiber in air (FIA) sampling event within the New Executive Office Building, located 725 17<sup>th</sup> Street, Washington, D.C. This report summarizes findings from the monitoring performed by Tidewater on October 26, 2002 and December 7, 2002. Tidewater's industrial hygienist Ms. Chamini Vinthanage and Allan Cooley, CSP performed the FIA sampling.

During the sampling event, Tidewater's industrial hygienist collected a total of 33 air samples that were analyzed via phase contrast microscopy (PCM). All samples were collected using low volume air sampling pumps. The sampling pumps were calibrated to a flow rate of 2.5 liters/minute and samples were collected over a six to eight-hour period to obtain a minimum sampling volume of 1200 liters per sample. All samples were collected within the normal breathing zone during normal business hours of 9:00 a.m. and 5:00 p.m., and weekend hours of 8:00 a.m. and 4:00 p.m. at the request of the building owner representative.

The samples were analyzed on-site using NIOSH Method 7400 by Tidewater's microscopist who has successfully completed the NIOSH 582 equivalent course entitled "Analyzing Airborne Fibers" and participates in Tidewater's laboratory quality control/quality assurance program.

The results indicate that none of the samples analyzed contained fiber levels at or above 0.01 fibers per cubic centimeter of air (f/cc). Since none of the areas sampled had fiber levels at or above the 0.01 f/cc, additional analysis by transmission electron microscopy (TEM) was not required for any of the samples.

The sample analysis results and corresponding FIA sampling locations are summarized in the attached tables. The field sampling data sheets are included in Appendix A.

Tidewater is pleased to have performed this FIA study. Please call us at (410) 997-4458 if you have any questions regarding this report.

Sincerely,  
TIDEWATER, INC.

Prasad Dissanayake, PE  
Project Manager

**APPENDIX A**  
**PCM DATA SHEETS**



April 23, 2015

Mr. Sam Schrecongost  
GSA Safety Environment and Fire Protection Branch  
301 7<sup>th</sup> Street, S.W., Room 2080  
Washington, D.C. 20407

**RE: Annual Fibers-in-Air Survey at the New Executive Office Building  
GSA Building #DC0105ZZ  
TTL-Arc Environmental Project Number: 11892.36/342-3**

Dear Mr. Schrecongost:

In accordance with our Industrial Hygiene Services contract with the General Services Administration (GSA), TTL-Arc Environmental, JV LLC (TTL-Arc) performed the annual fibers-in-air (FIA) survey at the New Executive Office Building (NEOB), from February 19 to February 23, 2015. The sampling event was conducted as part of annual, routine monitoring of existing FIA levels within occupied spaces of the facility.

TTL-Arc's Industrial Hygienist, Mr. David Steen, performed the sampling. Mr. Steen has received training equivalent to the National Institute for Occupational Safety and Health (NIOSH) 582 course for the sampling and analysis of fibers in air by NIOSH Method 7400.

### **Methodology**

Fibers-in-air samples were collected to fulfill requirements under GSA Fibers-in-Air protocols. As per the scope of work, 49 ambient air samples were collected using low volume sampling pumps with flow rates equal to or less than 3.5 liters per minute. Flow rates were measured with a rotameter that has been calibrated against a primary standard according to TTL-Arc's Quality Assurance/Quality Control (QA/QC) program. Six field blanks were collected for QA/QC purposes.

A minimum total air volume of 1200 liters (L) was obtained for each sample. Air samples were collected during evening hours at locations designated by the assigned building manager. Sampling cassettes were located three (3) to five (5) feet above ground to represent personal breathing levels and the sampling pumps were placed within occupied areas for the duration of the sampling period. The sample number and sample location for each sample are noted on the laboratory chain of custody and in Table 1, below.

The collected air samples were submitted to Scientific Analytical Institute (SAI), of Greensboro, North Carolina for analysis via Phase Contrast Microscopy (PCM) using NIOSH Method 7400. SAI is a participant in the American Industrial Hygiene Association's (AIHA's) Proficiency Analytical Testing (PAT) program for asbestos-in-air analysis and is an accredited AIHA Industrial Hygiene Laboratory (IHLAP).

<b>Table 1</b> <b>Fibers-in-air Sampling and Analysis Summary</b>			
<b>Sample Number</b>	<b>Location</b>	<b>PCM Results (f/cc)</b>	<b>TEM Results (S/mm<sup>2</sup>)</b>
021915-11-01	11th Floor - At Air Handler Unit A-11-03	<0.0021	-
021915-11-02	11th Floor - At Air Handler Unit AHU-11-02	<0.0021	-
021915-11-03	11th Floor - At Air Handler Unit AHU-11-04	<0.0022	-
021915-11-04	11th Floor - At Air Handler Unit AHU-11-01	<0.0022	-
021915-10-05	10th Floor - Suite 10025	0.0028	-
021915-10-06	10th Floor - Suite 10001	<0.0022	-
021915-10-07	10th Floor - at Service Elevator Hallway	<0.0022	-
021915-10-08	10th Floor - Suite 10202	<0.0022	-
021915-10-09	10th Floor - Office 10235A	<0.0022	-
021915-09-10	9th Floor - Suite 9025 (reception lobby)	<0.0021	-
021915-09-11	9th Floor - Suite 9002 (reception lobby)	<0.0022	-
021915-09-12	9th Floor - Suite 9104 Conference Room	<0.0021	-
021915-09-13	9th Floor - Suite 9215	<0.0021	-
021915-09-14	9th Floor - Suite 9235	<0.0021	-
021915-FB-01	Field Blank	<7.0 fibers	-
021915-FB-02	Field Blank	<7.0 fibers	-
022015-08-01	8th Floor - Suite 8025	<0.0021	-
022015-08-02	8th Floor - Suite 8002	<0.0022	-
022015-08-03	8th Floor - Suite 8236	<0.0022	-
022015-08-04	8th Floor - Suite 8222	<0.0022	-
022015-08-05	8th Floor - Suite 8201	<0.0022	-
022015-07-06	7th Floor - Suite 7025	<0.0022	-
022015-07-07	7th Floor - Suite 7002	<0.0022	-
022015-07-08	7th Floor - Suite 7106	<0.0022	-
022015-07-09	7th Floor - Suite 7236	<0.0022	-
022015-07-10	7th Floor - Suite 7203	<0.0022	-
022015-06-11	6th Floor - Suite 6025	<0.0022	-
022015-06-12	6th Floor - Suite 6002	<0.0021	-
022015-06-13	6th Floor - Suite 6116	<0.0021	-
022015-06-14	6th Floor - Suite 6208	<0.0022	-
022015-06-15	6th Floor - Suite 6235	<0.0022	-
022015-05-16	5th Floor - Main Hall outside 5020	<0.0021	-
022015-05-17	5th Floor - Suite 5001	<0.0021	-
022015-05-18	5th Floor - 5th Floor Service Elevator Hallway	<0.0022	-
022015-05-19	5th Floor - Main Hall 5th Floor Elevator Lobby	<0.0022	-
022015-FB-01	Field Blank	<7.0 fibers	-
022015-FB-02	Field Blank	<7.0 fibers	-
022315-04-01	4th Floor - Hallway outside Suite 4208	<0.0022	-
022315-04-02	4th Floor - Hallway outside Suite 4218	<0.0022	-
022315-04-03	4th Floor - Room 4106	<0.0022	-



022315-02-04	2nd Floor - North end of cafeteria dining room	<0.0022	-
022315-02-05	2nd Floor - Hallway outside Room 2200B	<0.0022	-
022315-02-06	2nd Floor - Fitness Center near Attendant/Reception Desk	<0.0022	-
022315-02-07	2nd Floor - Suite 2020, at Reception Desk on east side	<0.0022	-
022315-02-08	2nd Floor - Suite 2020, in offices area past kitchen	<0.0022	-
022315-G-09	Ground Floor - In east building lobby area past library	<0.0022	-
022315-G-10	Ground Floor - Security Office off west building entry	<0.0022	-
022315-G-11	Ground Floor - Hallway at G-229	<0.0022	-
022315-B1-12	Basement Floor 1 - MER Room B-112	<0.0022	-
022315-B1-13	Basement Floor 1 - Room B-101 (Carpenters Shop)	<0.0022	-
022315-B1-14	Basement Floor 1 - Suite B-235 (GSA Engineers Offices)	<0.0022	-
022315-B2-15	Basement Floor 2 - Hallway outside Room SB-236	<0.0022	-
022315-B2-16	Basement Floor 2 - Hallway at Stair 1	<0.0022	-
022315-FB-01	QA	<7.0 fibers	-
022315-FB-02	QA	<7.0 fibers	-

## Results

Of the 49 samples collected at the NEOB, each sample yielded PCM results below the 0.01 fibers per centimeter of air (f/cc) threshold for re-occupancy; therefore, no samples were upgraded for analysis using Transmission Electron Microscopy (TEM). No further action is required at this time.

TTL-Arc Environmental is pleased to have performed this air monitoring and analysis for GSA. If you have any questions please call us at (410) 659-9971.

Sincerely,

**TTL-Arc Environmental JV, LLC**



Stacy Kahatapitiya, CHMM, LEED GA  
 Project Manager



Christopher Younger, CIH  
 Industrial Hygienist Manager – National Region

***Attachment A:***  
***Laboratory Certificates of Analysis***



# Airborne Fiber Analysis

By Phase Contrast Microscopy  
NIOSH 7400, Issue 2, (A Counting Rules)



**Customer:** ARC Environmental  
1311 Haubert Rd  
Baltimore, MD 21230

**Attn:** Stacy Kahatapitiya

**Lab Order ID:** 1503306

**Analysis ID:** 1503306\_PCM

**Date Received:** 2/23/2015

**Project:** TTL# 11892.36

**Date Reported:** 2/23/2015

Sample ID	Description	Volume	Fibers	Filter	LOD	Conc.
Lab Sample ID	Lab Notes	Filter Area	Fields	( Fibers / mm <sup>2</sup> )	( Fibers / cc )	( Fibers / cc )
021915-11-01	11th Floor - At Air Handler Unit A-11-03	1258.49 L	< 5.5	< 7.0	0.0021	< 0.0021
1503306PCM_1		385 mm <sup>2</sup>	100			
021915-11-02	11th Floor - At Air Handler Unit AHU-11-02	1255.32 L	< 5.5	< 7.0	0.0021	< 0.0021
1503306PCM_2		385 mm <sup>2</sup>	100			
021915-11-03	11th Floor - At Air Handler Unit AHU-11-04	1207.8 L	< 5.5	< 7.0	0.0022	< 0.0022
1503306PCM_3		385 mm <sup>2</sup>	100			
021915-11-04	11th Floor - At Air Handler Unit AHU-11-01	1204.75 L	< 5.5	< 7.0	0.0022	< 0.0022
1503306PCM_4		385 mm <sup>2</sup>	100			
021915-10-05	10th Floor - Suite 10025	1237.35 L	7	8.9	0.0022	0.0028
1503306PCM_5		385 mm <sup>2</sup>	100			
021915-10-06	10th Floor - Suite 10001	1237.35 L	< 5.5	< 7.0	0.0022	< 0.0022
1503306PCM_6		385 mm <sup>2</sup>	100			
021915-10-07	10th Floor - at Service Elevator Hallway	1207.8 L	< 5.5	< 7.0	0.0022	< 0.0022
1503306PCM_7		385 mm <sup>2</sup>	100			
021915-10-08	10th Floor - Suite 10202	1203.45 L	< 5.5	< 7.0	0.0022	< 0.0022
1503306PCM_8		385 mm <sup>2</sup>	100			

This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by AIHA or any other agency of the U.S. government. Scientific Analytical Institute participates in the AIHA IHPAT program. IHPAT Laboratory ID: 173190 Unless otherwise noted blank sample correction was not performed on analytical results. ( Laboratory precision: Sr: 0.45 )

Bart Huber (16)

Analyst

Approved Signatory



# Airborne Fiber Analysis

By Phase Contrast Microscopy  
NIOSH 7400, Issue 2, (A Counting Rules)



**Customer:** ARC Environmental  
1311 Haubert Rd  
Baltimore, MD 21230

**Attn:** Stacy Kahatapitiya

**Lab Order ID:** 1503306

**Analysis ID:** 1503306\_PCM

**Date Received:** 2/23/2015

**Project:** TTL# 11892.36

**Date Reported:** 2/23/2015

Sample ID	Description	Volume	Fibers	Filter	LOD	Conc.
Lab Sample ID	Lab Notes	Filter Area	Fields	( Fibers / mm <sup>2</sup> )	( Fibers / cc )	( Fibers / cc )
021915-10-09	10th Floor - Office 10235A	1207.04 L	< 5.5	< 7.0	0.0022	< 0.0022
1503306PCM_9		385 mm <sup>2</sup>	100			
021915-09-10	9th Floor - Suite 9025 (reception lobby)	1281.42 L	< 5.5	< 7.0	0.0021	< 0.0021
1503306PCM_10		385 mm <sup>2</sup>	100			
021915-09-11	9th Floor - Suite 9002 (reception lobby)	1223.62 L	< 5.5	< 7.0	0.0022	< 0.0022
1503306PCM_11		385 mm <sup>2</sup>	100			
021915-09-12	9th Floor - Suite 9104 Conference Room	1261.08 L	< 5.5	< 7.0	0.0021	< 0.0021
1503306PCM_12		385 mm <sup>2</sup>	100			
021915-09-13	9th Floor - Suite 9215	1261.08 L	< 5.5	< 7.0	0.0021	< 0.0021
1503306PCM_13		385 mm <sup>2</sup>	100			
021915-09-14	9th Floor - Suite 9235	1254.3 L	< 5.5	< 7.0	0.0022	< 0.0021
1503306PCM_14		385 mm <sup>2</sup>	100			
021915-FB-01	QA	0 L	< 5.5	< 7.0	N/A	N/A
1503306PCM_15		385 mm <sup>2</sup>	100			
021915-FB-02	QA	0 L	< 5.5	< 7.0	N/A	N/A
1503306PCM_16		385 mm <sup>2</sup>	100			

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Bart Huber (16)

Analyst

Approved Signatory

1503306

**Client:** Arc Environmental, Inc.  
**Contact:** Stacy Kahatapitiya  
**Address:** 1311 Haubert Street - Baltimore, MD  
**Phone:** 410-659-9971  
**Fax:** 410-962-1065  
**Email:** [skahatapitiya@arcenvironmental.com](mailto:skahatapitiya@arcenvironmental.com)

**Project:** New Executive Office Bldg. (NEOB)  
 (Shipment 1 of 3)

**Client Notes:** TTL #11892.36

**P.O. #.**  
**Date Submitted:** 02/19/2015 0800 hrs.

**Analysis:** PCM  
**TurnAroundTime:** 12-hr

**\*Instructions:**

Use Column "B" for your contact info

To See an Example Click the  
bottom Example Tab.

Enter samples between "<<" and ">>"  
 Samples with a "<<" above the first sample  
 and with a ">>" below the last sample  
 enter your data on the first sheet "9"

Scientific  
Analytical  
Institute



Note: Data 1 and Data 2 are optional. 302-L Pomona Dr.  
 Greensboro, NC 27407  
 Phone: 336.292.3888  
 Fax: 336.292.3313  
 Email: [lab@sailab.com](mailto:lab@sailab.com)

Sample Number	Data 1	Sample Description	Data 2
---------------	--------	--------------------	--------

<<			
021915-11-01	11th Floor - At Air Handler Unit A-11-03	1258.49	
021915-11-02	11th Floor - At Air Handler Unit AHU-11-02	1255.32	
021915-11-03	11th Floor - At Air Handler Unit AHU-11-04	1207.8	
021915-11-04	11th Floor - At Air Handler Unit AHU-11-01	1204.75	
021915-10-05	10th Floor - Suite 10025	1237.35	
021915-10-06	10th Floor - Suite 10001	1237.35	
021915-10-07	10th Floor - at Service Elevator Hallway	1207.8	
021915-10-08	10th Floor - Suite 10202	1203.45	
021915-10-09	10th Floor - Office 10235A	1207.04	
021915-09-10	9th Floor - Suite 9025 (reception lobby)	1281.42	
021915-09-11	9th Floor - Suite 9002 (reception lobby)	1223.62	
021915-09-12	9th Floor - Suite 9104 Conference Room	1261.08	
021915-09-13	9th Floor - Suite 9215	1261.08	
021915-09-14	9th Floor - Suite 9235	1254.3	
021915-FB-01	QA	NA	
021915-FB-02	QA	NA	
>>			



Accepted



Rejected

Handwritten signature and date: 2/23



# Airborne Fiber Analysis

By Phase Contrast Microscopy  
NIOSH 7400, Issue 2, (A Counting Rules)



**Customer:** ARC Environmental  
1311 Haubert Rd  
Baltimore, MD 21230

**Attn:** Stacy Kahatapitiya

**Lab Order ID:** 1503461

**Analysis ID:** 1503461\_PCM

**Date Received:** 2/24/2015

**Project:** New Executive Office Bldg. (NEOB)  
(Shipment 2 of 3)

**Date Reported:** 2/24/2015

Sample ID	Description	Volume	Fibers	Filter	LOD	Conc.
Lab Sample ID	Lab Notes	Filter Area	Fields	(Fibers / mm <sup>2</sup> )	(Fibers / cc)	(Fibers / cc)
022015-08-01	8th Floor - Suite 8025	1254.3 L	< 5.5	< 7.0	0.0022	< 0.0021
1503461PCM_1		385 mm <sup>2</sup>	100			
022015-08-02	8th Floor - Suite 8002	1233.13 L	< 5.5	< 7.0	0.0022	< 0.0022
1503461PCM_2		385 mm <sup>2</sup>	100			
022015-08-03	8th Floor - Suite 8236	1223.79 L	< 5.5	< 7.0	0.0022	< 0.0022
1503461PCM_3		385 mm <sup>2</sup>	100			
022015-08-04	8th Floor - Suite 8222	1207.77 L	< 5.5	< 7.0	0.0022	< 0.0022
1503461PCM_4		385 mm <sup>2</sup>	100			
022015-08-05	8th Floor - Suite 8201	1210.94 L	< 5.5	< 7.0	0.0022	< 0.0022
1503461PCM_5		385 mm <sup>2</sup>	100			
022015-07-06	7th Floor - Suite 7025	1214.11 L	< 5.5	< 7.0	0.0022	< 0.0022
1503461PCM_6		385 mm <sup>2</sup>	100			
022015-07-07	7th Floor - 7002	1210.94 L	< 5.5	< 7.0	0.0022	< 0.0022
1503461PCM_7		385 mm <sup>2</sup>	100			
022015-07-08	7th Floor - Suite 7106	1210.94 L	< 5.5	< 7.0	0.0022	< 0.0022
1503461PCM_8		385 mm <sup>2</sup>	100			

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Christopher Subudhi (21)

Analyst

Approved Signatory



# Airborne Fiber Analysis

By Phase Contrast Microscopy  
NIOSH 7400, Issue 2, (A Counting Rules)



**Customer:** ARC Environmental  
1311 Haubert Rd  
Baltimore, MD 21230

**Attn:** Stacy Kahatapitiya

**Lab Order ID:** 1503461

**Analysis ID:** 1503461\_PCM

**Date Received:** 2/24/2015

**Project:** New Executive Office Bldg. (NEOB)  
(Shipment 2 of 3)

**Date Reported:** 2/24/2015

Sample ID	Description	Volume	Fibers	Filter	LOD	Conc.
Lab Sample ID	Lab Notes	Filter Area	Fields	(Fibers / mm <sup>2</sup> )	(Fibers / cc)	(Fibers / cc)
022015-07-09	7th Floor - Suite 7236	1207.77 L	< 5.5	< 7.0	0.0022	< 0.0022
1503461PCM_9		385 mm <sup>2</sup>	100			
022015-07-10	7th Floor - Suite 7203	1240.74 L	< 5.5	< 7.0	0.0022	< 0.0022
1503461PCM_10		385 mm <sup>2</sup>	100			
022015-06-11	6th Floor - Suite 6025	1207.77 L	< 5.5	< 7.0	0.0022	< 0.0022
1503461PCM_11		385 mm <sup>2</sup>	100			
022015-06-12	6th Floor - Suite 6002	1254.3 L	< 5.5	< 7.0	0.0022	< 0.0021
1503461PCM_12		385 mm <sup>2</sup>	100			
022015-06-13	6th Floor - Suite 6116	1257.69 L	< 5.5	< 7.0	0.0021	< 0.0021
1503461PCM_13		385 mm <sup>2</sup>	100			
022015-06-14	6th Floor - Suite 6208	1230 L	< 5.5	< 7.0	0.0022	< 0.0022
1503461PCM_14		385 mm <sup>2</sup>	100			
022015-06-15	6th Floor - Suite 6235	1223.44 L	< 5.5	< 7.0	0.0022	< 0.0022
1503461PCM_15		385 mm <sup>2</sup>	100			
022015-05-16	5th Floor - Main Hall outside 5020	1257.69 L	< 5.5	< 7.0	0.0021	< 0.0021
1503461PCM_16		385 mm <sup>2</sup>	100			

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Christopher Subudhi (21)

Analyst

Approved Signatory



# Airborne Fiber Analysis

By Phase Contrast Microscopy  
NIOSH 7400, Issue 2, (A Counting Rules)



**Customer:** ARC Environmental  
1311 Haubert Rd  
Baltimore, MD 21230

**Attn:** Stacy Kahatapitiya

**Lab Order ID:** 1503461

**Analysis ID:** 1503461\_PCM

**Date Received:** 2/24/2015

**Project:** New Executive Office Bldg. (NEOB)  
(Shipment 2 of 3)

**Date Reported:** 2/24/2015

Sample ID	Description	Volume	Fibers	Filter	LOD	Conc.
Lab Sample ID	Lab Notes	Filter Area	Fields	( Fibers / mm <sup>2</sup> )	( Fibers / cc )	( Fibers / cc )
022015-05-17	5th Floor - Suite 5001	1254.3 L	< 5.5	< 7.0	0.0022	< 0.0021
1503461PCM_17		385 mm <sup>2</sup>	100			
022015-05-18	5th Floor - 5th Floor Service Elevator Hallway	1250.91 L	< 5.5	< 7.0	0.0022	< 0.0022
1503461PCM_18		385 mm <sup>2</sup>	100			
022015-05-19	5th Floor - Main Hall 5th Floor Elevator Lobby	1250.91 L	< 5.5	< 7.0	0.0022	< 0.0022
1503461PCM_19		385 mm <sup>2</sup>	100			
022015-FB-01	QA	0 L	< 5.5	< 7.0	N/A	N/A
1503461PCM_20		385 mm <sup>2</sup>	100			
022015-FB-02	QA	0 L	< 5.5	< 7.0	N/A	N/A
1503461PCM_21		385 mm <sup>2</sup>	100			

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Christopher Subudhi (21)

Analyst

Approved Signatory



1503461



**Client:** Arc Environmental, Inc.  
**Contact:** Stacy Kahatapitiya  
**Address:** 1311 Haubert Street - Baltimore, MD  
**Phone:** 410-659-9971  
**Fax:** 410-962-1065  
**Email:** skahatapitiya@arcenvironmental.com

**Project:** New Executive Office Bldg. (NEOB)  
 (Shipment 2 of 3)  
**Client Notes:** TTL #11892.36

**P.O. #:**  
**Date Submitted:** 02/20/2015 0800 hrs.  
**Analysis:** PCM  
**TurnAroundTime:** 12-hr

**\*Instructions:**  
 Use Column "B" for your contact info  
 To See an Example Click the  
 bottom Example Tab.

Enter samples between "<<" and "  
 samples with a "<<" above the fir  
 and with a ">>" below the last sa  
 enter your data on the first sheet "S



Note: Data 1 and Data 2 are optional  
 Data 1 is that do not show up on the office  
 report, however they will be included  
 the electronic data returned to you  
 date your reintegration of the report

**302-L Pomona Dr.  
 Greensboro, NC 27407  
 Phone: 336.292.3888  
 Fax: 336.292.3313  
 Email: lab@sailab.com**

Sample Number	Data 1	Sample Description	Data 2
<<			
022015-08-01	8th Floor - Suite 8025	1254.3	
022015-08-02	8th Floor - Suite 8002	1233.13	
022015-08-03	8th Floor - Suite 8236	1223.79	
022015-08-04	8th Floor - Suite 8222	1207.77	
022015-08-05	8th Floor - Suite 8201	1210.94	
022015-07-06	7th Floor - Suite 7025	1214.11	
022015-07-07	7th Floor - 7002	1210.94	
022015-07-08	7th Floor - Suite 7106	1210.94	
022015-07-09	7th Floor - Suite 7236	1207.77	
022015-07-10	7th Floor - Suite 7203	1240.74	
022015-06-11	6th Floor - Suite 6025	1207.77	
022015-06-12	6th Floor - Suite 6002	1254.3	
022015-06-13	6th Floor - Suite 6116	1257.69	
022015-06-14	6th Floor - Suite 6208	1230	
022015-06-15	6th Floor - Suite 6235	1223.44	
022015-05-16	5th Floor - Main Hall outside 5020	1257.69	
022015-05-17	5th Floor - Suite 5001	1254.3	
022015-05-18	5th Floor - 5th Floor Service Elevator Hallway	1250.91	

2/24 130P

*B. H. H. H.*

**Accepted** ☒

**Rejected** ☐

1503461



022015-05-19	5th Floor - Main Hall 5th Floor Elevator Lobby	1250.91
022015-FB-01	QA	NA
022015-FB-02	QA	NA



# Airborne Fiber Analysis

By Phase Contrast Microscopy  
NIOSH 7400, Issue 2, (A Counting Rules)



**Customer:** ARC Environmental  
1311 Haubert Rd  
Baltimore, MD 21230

**Attn:** Stacy Kahatapitiya

**Lab Order ID:** 1503604

**Analysis ID:** 1503604\_PCM

**Date Received:** 2/25/2015

**Project:** New Executive Office Bldg (NEOB)  
TTL #11892.36

**Date Reported:** 2/25/2015

Sample ID	Description	Volume	Fibers	Filter	LOD	Conc.
Lab Sample ID	Lab Notes	Filter Area	Fields	( Fibers / mm <sup>2</sup> )	( Fibers / cc )	( Fibers / cc )
022315-04-01	4th Floor - Hallway outside Suite 4208	1210.32 L	< 5.5	< 7.0	0.0022	< 0.0022
1503604PCM_1		385 mm <sup>2</sup>	100			
022315-04-02	4th Floor - Hallway outside Suite 4218	1207.04 L	< 5.5	< 7.0	0.0022	< 0.0022
1503604PCM_2		385 mm <sup>2</sup>	100			
022315-04-03	4th Floor - Room 4106	1204.6 L	< 5.5	< 7.0	0.0022	< 0.0022
1503604PCM_3		385 mm <sup>2</sup>	100			
022315-02-04	2nd Floor - North end of cafeteria dinning room	1207.04 L	< 5.5	< 7.0	0.0022	< 0.0022
1503604PCM_4		385 mm <sup>2</sup>	100			
022315-02-05	2nd Floor - Hallway outside Room 2200B	1203.76 L	< 5.5	< 7.0	0.0022	< 0.0022
1503604PCM_5		385 mm <sup>2</sup>	100			
022315-02-06	2nd Floor - Fitness Center near Attendant/Reception Desk	1220.16 L	< 5.5	< 7.0	0.0022	< 0.0022
1503604PCM_6		385 mm <sup>2</sup>	100			
022315-02-07	2nd Floor - Suite 2020, at Reception Desk on east side	1216.88 L	< 5.5	< 7.0	0.0022	< 0.0022
1503604PCM_7		385 mm <sup>2</sup>	100			
022315-02-08	2nd Floor - Suite 2020, in offices area past kitchen	1207.04 L	< 5.5	< 7.0	0.0022	< 0.0022
1503604PCM_8		385 mm <sup>2</sup>	100			

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Darrin Parrick (18)

Analyst

Approved Signatory



# Airborne Fiber Analysis

By Phase Contrast Microscopy  
NIOSH 7400, Issue 2, (A Counting Rules)



**Customer:** ARC Environmental  
1311 Haubert Rd  
Baltimore, MD 21230

**Attn:** Stacy Kahatapitiya

**Lab Order ID:** 1503604

**Analysis ID:** 1503604\_PCM

**Date Received:** 2/25/2015

**Project:** New Executive Office Bldg (NEOB)  
TTL #11892.36

**Date Reported:** 2/25/2015

Sample ID	Description	Volume	Fibers	Filter	LOD	Conc.
Lab Sample ID	Lab Notes	Filter Area	Fields	( Fibers / mm <sup>2</sup> )	( Fibers / cc )	( Fibers / cc )
022315-G-09	Ground Floor - In east building lobby area past library	1244.13 L	< 5.5	< 7.0	0.0022	< 0.0022
1503604PCM_9		385 mm <sup>2</sup>	100			
022315-G-10	Ground Floor - Security Office off west building entry	1200.48 L	< 5.5	< 7.0	0.0022	< 0.0022
1503604PCM_10		385 mm <sup>2</sup>	100			
022315-G-11	Ground Floor - Hallway at G-229	1226.72 L	< 5.5	< 7.0	0.0022	< 0.0022
1503604PCM_11		385 mm <sup>2</sup>	100			
022315-B1-12	Basement Floor 1 - MER Room B-112	1207.04 L	< 5.5	< 7.0	0.0022	< 0.0022
1503604PCM_12		385 mm <sup>2</sup>	100			
022315-B1-13	Basement Floor 1 - Room B-101 (Carpenters Shop)	1246.05 L	< 5.5	< 7.0	0.0022	< 0.0022
1503604PCM_13		385 mm <sup>2</sup>	100			
022315-B1-14	Basement Floor 1 - Suite B-235 (GSA Engineers Offices)	1207.04 L	< 5.5	< 7.0	0.0022	< 0.0022
1503604PCM_14		385 mm <sup>2</sup>	100			
022315-B2-15	Basement Floor 2 - Hallway outside Room SB-236	1203.45 L	< 5.5	< 7.0	0.0022	< 0.0022
1503604PCM_15		385 mm <sup>2</sup>	100			
022315-B2-16	Basement Floor 2 - Hallway at Stair 1	1200.06 L	< 5.5	< 7.0	0.0022	< 0.0022
1503604PCM_16		385 mm <sup>2</sup>	100			

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Darrin Parrick (18)

Analyst

Approved Signatory



# Airborne Fiber Analysis

By Phase Contrast Microscopy  
NIOSH 7400, Issue 2, (A Counting Rules)



**Customer:** ARC Environmental  
1311 Haubert Rd  
Baltimore, MD 21230

**Attn:** Stacy Kahatapitiya

**Lab Order ID:** 1503604

**Analysis ID:** 1503604\_PCM

**Date Received:** 2/25/2015

**Project:** New Executive Office Bldg (NEOB)  
TTL #11892.36

**Date Reported:** 2/25/2015

Sample ID	Description	Volume	Fibers	Filter	LOD	Conc.
Lab Sample ID	Lab Notes	Filter Area	Fields	( Fibers / mm <sup>2</sup> )	( Fibers / cc )	( Fibers / cc )
022315-FB-01	QA	0 L	< 5.5	< 7.0	N/A	N/A
1503604PCM_17		385 mm <sup>2</sup>	100			
022315-FB-02	QA	0 L	< 5.5	< 7.0	N/A	N/A
1503604PCM_18		385 mm <sup>2</sup>	100			

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Darrin Parrick (18)

Analyst

Approved Signatory



1503604

**Client:** Arc Environmental, Inc.  
**Contact:** Stacy Kahatapitiya  
**Address:** 1311 Haubert Street - Baltimore, MD  
**Phone:** 410-659-9971  
**Fax:** 410-962-1065  
**Email:** skahatapitiya@arcenvironmental.com  
  
**Project:** New Executive Office Bldg. (NEOB)  
 (Shipment 3 of 3)  
**Client Notes:** TTL #11892.36  
  
**P.O. #:**  
**Date Submitted:** 02/23/2015 0800 hrs.  
  
**Analysis:** PCM  
**TurnAroundTime:** 12-hr

**\*Instructions:**  
 Use Column "B" for your contact info

To See an Example Click the  
 bottom Example Tab.

Enter samples between "<<" and "  
 samples with a "<<" above the first  
 and with a ">>" below the last sample  
 Enter your data on the first sheet "S

Scientific  
 Analytical  
 Institute



Note: Data 1 and Data 2 are optional. 302-L Pomona Dr.  
 Data 1s that do not show up on the office Greensboro, NC 27407  
 report, however they will be included. Phone: 336.292.3888  
 the electronic data returned to you. Fax: 336.292.3313  
 Date your reintegration of the report. Email: lab@sailab.com

Sample Number	Data 1	Sample Description	Data 2
<<			
022315-04-01	4th Floor - Hallway outside Suite 4208	1210.32	
022315-04-02	4th Floor - Hallway outside Suite 4218	1207.04	
022315-04-03	4th Floor - Room 4106	1204.6	
022315-02-04	2nd Floor - North end of cafeteria dinning room	1207.04	
022315-02-05	2nd Floor - Hallway outside Room 2200B	1203.76	
022315-02-06	2nd Floor - Fitness Center near Attendant/Reception Desk	1220.16	
022315-02-07	2nd Floor - Suite 2020, at Reception Desk on east side	1216.88	
022315-02-08	2nd Floor - Suite 2020, in offices area past kitchen	1207.04	
022315-G-09	Ground Floor - In east building lobby area past library	1244.13	
022315-G-10	Ground Floor - Security Office off west building entry	1200.48	
022315-G-11	Ground Floor - Hallway at G-229	1226.72	
022315-B1-12	Basement Floor 1 - MER Room B-112	1207.04	
022315-B1-13	Basement Floor 1 - Room B-101 (Carpenters Shop)	1246.05	
022315-B1-14	Basement Floor 1 - Suite B-235 (GSA Engineers Offices)	1207.04	
022315-B2-15	Basement Floor 2 - Hallway outside Room SB-236	1203.45	
022315-B2-16	Basement Floor 2 - Hallway at Stair 1	1200.06	
022315-FB-01	QA	NA	
022315-FB-02	QA	NA	

Accepted ☒

Rejected ☐

Miller 2-24

May 30, 2014

Mr. Tim Sleeth  
Industrial Hygienist  
General Services Administration (GSA)  
Safety, Environmental, & Fire Protection Branch  
301 7th Street, SW, Room 2080  
Washington, DC 20407

RE: **Fiber-in-Air Survey Report**  
**New Executive Office Building**  
Contract Number: GS-11P-12-DC-C-0007  
Mabbett Project No.: 2012011.043

Dear Mr. Sleeth:

Mabbett & Associates, Inc. (Mabbett®) received a request from GSA, NCR, Service Delivery Support Safety, Environmental, and Fire Protection Branch to conduct asbestos fiber-in-air (FIA) testing at New Executive Office Building (NEOB), located at 725 17th Street NW, Washington, DC. 20503.

Mabbett Industrial Hygienists Lindsay Mahoney and Timothy Kenny performed the survey on May 12-13, 2014. The survey was performed in accordance with GSA fiber-in-air sampling protocol.

## Methods

Fiber-in-air samples were collected to fulfill requirements under GSA fiber-in-air protocols. Forty-seven ambient air samples were collected using 25 mm, 0.8 micron, mixed cellulose ester filter cassettes connected to low volume sampling pumps with plastic tubing, sampled at a rate of three to four liters per minute. A minimum total air volume of 1200 liters was obtained for all samples collected. Flow rates were measured with a rotometer that was calibrated against a primary standard within a year of use. Five field blanks were collected for quality control.

Air samples were collected during normal working hours at locations distributed randomly throughout the building. Sampling cassettes were positioned three to five feet above the floor. The sampling pumps were placed within occupied areas for the duration of the sampling period or directly outside occupied areas per the property manager.

The air samples were submitted to Scientific Analytical Institute Inc. (SAI) of Greensboro, North Carolina for analysis via Phase Contrast Microscopy (PCM) using NIOSH Method 7400. Follow up analysis, if necessary, was analyzed by Transmission Electron Microscopy (TEM). SAI is accredited by the American Industrial Hygiene Association (AIHA) and participates in the National Voluntary Laboratory Accreditation Program (NVLAP) for asbestos analyses.

## Findings

Airborne fiber concentrations of all samples collected, except two, were found to be below the GSA action level of 0.01 fibers per cubic centimeter (f/cc). Sampling results for Sample NEOB 31 was 0.025 f/cc, and Sample

NEOB 47 was 0.01 f/cc. NEOB 31 sample results by TEM analysis were 0.0048 asbestos structures per cubic centimeter (str/cc), with no asbestos structures detected greater than 0.5 and less than 5.0 micrometers. There were no asbestos structures detected in NEOB 47 sample analysis by TEM.

Sampling results are summarized in Table 1 below. Detailed sampling information can be found in the Laboratory Analysis Reports (Attachment A) and Sample Collection Data (Attachment B).

<b>Table 1</b> <b>PCM and TEM Fiber in Air Sampling Results Summary</b> <b>(Samples Collected May 12-13, 2014)</b>				
<b>Sample ID</b>	<b>Sample Location</b>	<b>Volume (L)</b>	<b>Fibers/100 Fields</b>	<b>Fibers/cc</b>
NEOB-1	10th Floor 10116 Copy Room	1263.5	22	<0.01
NEOB-2	10TH Floor S. Levenbach Office	1256.5	12	<0.01
NEOB-3	10th Floor S. Martinez	1260	<5.5	<0.01
NEOB-4	10th Floor 10021 Copy Room	1253	<5.5	<0.01
NEOB-5	10th Floor 10001 Conference Room	1235.5	<5.5	<0.01
NEOB-6	9th Floor 9116 Copy Room	1228.5	<5.5	<0.01
NEOB-7	9th Floor 9208 Vacant Office	1228.5	<5.5	<0.01
NEOB-8	9th Floor 9208E	1225	<5.5	<0.01
NEOB-9	9th Floor 9025 Office	1221.5	7	<0.01
NEOB-10	9th Floor 9002 Office	1225	<5.5	<0.01
NEOB-11	8 <sup>th</sup> Floor 8208 S. Widor Office	1388	12	<0.01
NEOB-12	8 <sup>th</sup> Floor 8208 C. Hurban Office	1392	<5.5	<0.01
NEOB-13	8 <sup>th</sup> Floor 8018 File Room	1380	<5.5	<0.01
NEOB-14	8 <sup>th</sup> Floor 8001 Lobby	1368	6	<0.01
NEOB-15	7 <sup>th</sup> Floor 7213 Copy Room	1352	<5.5	<0.01
NEOB-16	7 <sup>th</sup> Floor 7235 Suite	1336	6	<0.01
NEOB-17	7 <sup>th</sup> Floor 7026 Lobby	1336	<5.5	<0.01
NEOB-18	7 <sup>th</sup> Floor 7005 Lobby	1332	<5.5	<0.01
NEOB-19	6 <sup>th</sup> Floor 6116 Office	1336	9	<0.01
NEOB-20	6 <sup>th</sup> Floor 6202 Office	1312	<5.5	<0.01
NEOB-21	6 <sup>th</sup> Floor 6226 Lobby	1256	<5.5	<0.01
NEOB-22	6 <sup>th</sup> Floor 6025 Lobby	1256	<5.5	<0.01
NEOB-23	6 <sup>th</sup> Floor 6001 Office	1252	<5.5	<0.01
NEOB-24	5 <sup>th</sup> Floor Outside 2050	1240	<5.5	<0.01



<b>Table 1</b> <b>PCM and TEM Fiber in Air Sampling Results Summary</b> <b>(Samples Collected May 12-13, 2014)</b>					
<b>Sample ID</b>	<b>Sample Location</b>	<b>Volume (L)</b>	<b>Fibers/ 100 Fields</b>	<b>Fibers/cc</b>	
NEOB-25	5 <sup>th</sup> Floor Outside 5001	1236	8	<0.01	
NEOB-26	4 <sup>th</sup> Floor Outside 4208	1208	<5.5	<0.01	
NEOB-27	4 <sup>th</sup> Floor Outside 4217	1208	<5.5	<0.01	
NEOB-28	4 <sup>th</sup> Floor Elevator Lobby	1208	<5.5	<0.01	
NEOB-29	2 <sup>nd</sup> Floor GSA Office	1260	20	<0.01	
NEOB-30	2 <sup>nd</sup> Floor Gym	1444	<5.5	<0.01	
NEOB-31	2 <sup>nd</sup> Floor Cafeteria	1246	63	0.025f/cc	0.0048 str/cc
NEOB-32	B1 Carpenter Break Room	1253	<5.5	<0.01	
NEOB-33	B1 Sheet Metal Shop	1225	<5.5	<0.01	
NEOB-34	B1 Engineer Shop	1218	<5.5	<0.01	
NEOB-35	B1 Elevator Shop Break Room	1218	<5.5	<0.01	
NEOB-36	B1 Corridor by B208	1232	23.5	<0.01	
NEOB-37	B2 Plumbing Shop	1440	<5.5	<0.01	
NEOB-38	B2 Main Break Area	1424	<5.5	<0.01	
NEOB-39	B2 Corridor by SB-234	1360	10	<0.01	
NEOB-40	B2 Steam Room	1388	10.5	<0.01	
NEOB-41	B2 SB-112 Break Room	1380	<5.5	<0.01	
NEOB-42	G-008 Hallway	1376	21.5	<0.01	
NEOB-43	G Level by Courtyard	1372	22	<0.01	
NEOB-44	G-202 Hallway	1356	23	<0.01	
NEOB-45	G Level by Bike Shop	1356	<5.5	<0.01	
NEOB-46	G-211 Break Room	1368	5.5	<0.01	
NEOB-47	2 <sup>nd</sup> Floor 2200B Yoga Room	1364	28	0.01f/cc	<0.0044 str/cc
NEOB-48	BLANK	0	<5.5	N/A	
NEOB-49	BLANK	0	<5.5	N/A	
NEOB-50	BLANK	0	<5.5	N/A	
NEOB-51	BLANK	0	<5.5	N/A	
NEOB-52	BLANK	0	<5.5	N/A	

f/cc = fibers per cubic centimeter

str/cc = structures per cubic centimeter

## Conclusions

All asbestos fiber in air sample results were below acceptable levels. No further action and improvement are required.

Mabbett appreciates this opportunity to provide this fiber-in-air monitoring for GSA, NCR. Should you have any questions or concerns, please do not hesitate to contact us at (703) 486-5680.

Very truly yours,

### MABBETT & ASSOCIATES, INC.

By:

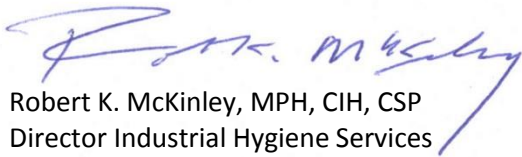


Timothy J. Kenny  
Industrial Hygienist



Lindsay Mahoney  
Industrial Hygienist

Reviewed by:



Robert K. McKinley, MPH, CIH, CSP  
Director Industrial Hygiene Services

Attachment A: Laboratory Analysis Reports

Attachment B: Sampling Data

**Attachment A**

**Laboratory Analysis Reports**



# Airborne Fiber Analysis

By Phase Contrast Microscopy  
NIOSH 7400, Issue 2, (A Counting Rules)



**Customer:** Mabbett & Associates  
1940 Duke St #200  
Alexandria, VA 22314

**Attn:** Timothy Kenny  
Damien Hammond

**Lab Order ID:** 1409088

**Analysis ID:** 1409088\_PCM

**Date Received:** 5/19/2014

**Project:** GSA NEOB Fiber in Air Survey

**Date Reported:** 5/19/2014

Sample ID	Description	Volume	Fibers	Filter	LOD	Conc.
Lab Sample ID	Lab Notes	Filter Area	Fields	( Fibers / mm <sup>2</sup> )	( Fibers / cc )	( Fibers / cc )
NEOB-1	10th Floor 10116 Copy Room	1263.5 L	22	28	0.0021	0.0085
1409088PCM_1		385 mm <sup>2</sup>	100			
NEOB-2	10th Floor S. Levenbach Office	1256.5 L	12	15	0.0021	0.0046
1409088PCM_2		385 mm <sup>2</sup>	100			
NEOB-3	10th Floor S. Martinez	1260 L	< 5.5	< 7.0	0.0021	< 0.0021
1409088PCM_3		385 mm <sup>2</sup>	100			
NEOB-4	10th Floor 10021 Copy Room	1253 L	< 5.5	< 7.0	0.0022	< 0.0022
1409088PCM_4		385 mm <sup>2</sup>	100			
NEOB-5	10th Floor 10001 Conference Room	1235.5 L	< 5.5	< 7.0	0.0022	< 0.0022
1409088PCM_5		385 mm <sup>2</sup>	100			
NEOB-6	9th Floor 9116 Copy Room	1228.5 L	< 5.5	< 7.0	0.0022	< 0.0022
1409088PCM_6		385 mm <sup>2</sup>	100			
NEOB-7	9th Floor 9208 Vacant Office	1228.5 L	< 5.5	< 7.0	0.0022	< 0.0022
1409088PCM_7		385 mm <sup>2</sup>	100			
NEOB-8	9th Floor 9208E Office	1225 L	< 5.5	< 7.0	0.0022	< 0.0022
1409088PCM_8		385 mm <sup>2</sup>	100			

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Matt Thomas (52)

Analyst

Approved Signatory



# Airborne Fiber Analysis

By Phase Contrast Microscopy  
NIOSH 7400, Issue 2, (A Counting Rules)



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1940 Duke St #200  
Alexandria, VA 22314

**Attn:** Timothy Kenny  
Damien Hammond

**Lab Order ID:** 1409088

**Analysis ID:** 1409088\_PCM

**Date Received:** 5/19/2014

**Project:** GSA NEOB Fiber in Air Survey

**Date Reported:** 5/19/2014

Sample ID	Description	Volume	Fibers	Filter	LOD	Conc.
Lab Sample ID	Lab Notes	Filter Area	Fields	( Fibers / mm <sup>2</sup> )	( Fibers / cc )	( Fibers / cc )
NEOB-9	9th Floor 9025 Office	1221.5 L	7	8.9	0.0022	0.0028
1409088PCM_9		385 mm <sup>2</sup>	100			
NEOB-10	9th Floor 9002 Office	1225 L	< 5.5	< 7.0	0.0022	< 0.0022
1409088PCM_10		385 mm <sup>2</sup>	100			
NEOB-11	8th Floor 8208 S. Widor Office	1388 L	12	15	0.0019	0.0042
1409088PCM_11		385 mm <sup>2</sup>	100			
NEOB-12	8th Floor 8208 C. Hurban Office	1392 L	< 5.5	< 7.0	0.0019	< 0.0019
1409088PCM_12		385 mm <sup>2</sup>	100			
NEOB-13	8th Floor 8018 FileRoom	1380 L	< 5.5	< 7.0	0.0020	< 0.0020
1409088PCM_13		385 mm <sup>2</sup>	100			
NEOB-14	8th Floor 8001 Lobby	1368 L	6	7.6	0.0020	0.0021
1409088PCM_14		385 mm <sup>2</sup>	100			
NEOB-15	7th Floor 7213 Copy Room	1352 L	< 5.5	< 7.0	0.0020	< 0.0020
1409088PCM_15		385 mm <sup>2</sup>	100			
NEOB-16	7th Floor 7235 Suite	1336 L	6	7.6	0.0020	0.0022
1409088PCM_16		385 mm <sup>2</sup>	100			

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NIOSH 7400, Issue 2, (A Counting Rules)



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1940 Duke St #200  
Alexandria, VA 22314

**Attn:** Timothy Kenny  
Damien Hammond

**Lab Order ID:** 1409088

**Analysis ID:** 1409088\_PCM

**Date Received:** 5/19/2014

**Project:** GSA NEOB Fiber in Air Survey

**Date Reported:** 5/19/2014

Sample ID	Description	Volume	Fibers	Filter	LOD	Conc.
Lab Sample ID	Lab Notes	Filter Area	Fields	( Fibers / mm <sup>2</sup> )	( Fibers / cc )	( Fibers / cc )
NEOB-17	7th Floor 7026 Lobby	1336 L	< 5.5	< 7.0	0.0020	< 0.0020
1409088PCM_17		385 mm <sup>2</sup>	100			
NEOB-18	7th Floor 7005 Lobby	1332 L	< 5.5	< 7.0	0.0020	< 0.0020
1409088PCM_18		385 mm <sup>2</sup>	100			
NEOB-19	6th Floor 6116 Office	1336 L	9	11	0.0020	0.0032
1409088PCM_19		385 mm <sup>2</sup>	100			
NEOB-20	6th Floor 6202 Office	1312 L	< 5.5	< 7.0	0.0021	< 0.0021
1409088PCM_20		385 mm <sup>2</sup>	100			
NEOB-21	6th Floor 6226 Lobby	1256 L	< 5.5	< 7.0	0.0021	< 0.0021
1409088PCM_21		385 mm <sup>2</sup>	100			
NEOB-22	6th Floor 6025 Lobby	1256 L	< 5.5	< 7.0	0.0021	< 0.0021
1409088PCM_22		385 mm <sup>2</sup>	100			
NEOB-23	6th Floor 6001 Office	1252 L	< 5.5	< 7.0	0.0022	< 0.0022
1409088PCM_23		385 mm <sup>2</sup>	100			
NEOB-24	5th Floor Outside 2050	1240 L	< 5.5	< 7.0	0.0022	< 0.0022
1409088PCM_24		385 mm <sup>2</sup>	100			

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NIOSH 7400, Issue 2, (A Counting Rules)



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Alexandria, VA 22314

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Damien Hammond

**Lab Order ID:** 1409088

**Analysis ID:** 1409088\_PCM

**Date Received:** 5/19/2014

**Project:** GSA NEOB Fiber in Air Survey

**Date Reported:** 5/19/2014

Sample ID	Description	Volume	Fibers	Filter	LOD	Conc.
Lab Sample ID	Lab Notes	Filter Area	Fields	( Fibers / mm <sup>2</sup> )	( Fibers / cc )	( Fibers / cc )
NEOB-25	5th Floor Outside 5001	1236 L	8	10.	0.0022	0.0031
1409088PCM_25		385 mm <sup>2</sup>	100			
NEOB-26	4th Floor Outside 4208	1208 L	< 5.5	< 7.0	0.0022	< 0.0022
1409088PCM_26		385 mm <sup>2</sup>	100			
NEOB-27	4th Floor Outside 4217	1208 L	< 5.5	< 7.0	0.0022	< 0.0022
1409088PCM_27		385 mm <sup>2</sup>	100			
NEOB-28	4th Floor Elevator Lobby	1208 L	< 5.5	< 7.0	0.0022	< 0.0022
1409088PCM_28		385 mm <sup>2</sup>	100			
NEOB-29	2nd Floor GSA Office	1260 L	20	25	0.0021	0.0076
1409088PCM_29		385 mm <sup>2</sup>	100			
NEOB-30	2nd Floor Gym	1444 L	< 5.5	< 7.0	0.0019	< 0.0019
1409088PCM_30		385 mm <sup>2</sup>	100			
NEOB-31	2nd Floor Cafeteria	1246 L	63	80.	0.0022	0.025
1409088PCM_31		385 mm <sup>2</sup>	100			
NEOB-32	B1 Carpenter Break Room	1253 L	< 5.5	< 7.0	0.0022	< 0.0022
1409088PCM_32		385 mm <sup>2</sup>	100			

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Matt Thomas (52)

Analyst

Approved Signatory



# Airborne Fiber Analysis

By Phase Contrast Microscopy  
NIOSH 7400, Issue 2, (A Counting Rules)



**Customer:** Mabbett & Associates  
1940 Duke St #200  
Alexandria, VA 22314

**Attn:** Timothy Kenny  
Damien Hammond

**Lab Order ID:** 1409088

**Analysis ID:** 1409088\_PCM

**Date Received:** 5/19/2014

**Project:** GSA NEOB Fiber in Air Survey

**Date Reported:** 5/19/2014

Sample ID	Description	Volume	Fibers	Filter	LOD	Conc.
Lab Sample ID	Lab Notes	Filter Area	Fields	( Fibers / mm <sup>2</sup> )	( Fibers / cc )	( Fibers / cc )
NEOB-33	B1 Sheet Metal Shop	1225 L	< 5.5	< 7.0	0.0022	< 0.0022
1409088PCM_33		385 mm <sup>2</sup>	100			
NEOB-34	B1 Engineer Shop	1218 L	< 5.5	< 7.0	0.0022	< 0.0022
1409088PCM_34		385 mm <sup>2</sup>	100			
NEOB-35	B1 Elevator Shop Break Room	1218 L	< 5.5	< 7.0	0.0022	< 0.0022
1409088PCM_35		385 mm <sup>2</sup>	100			
NEOB-36	B1 Corridor by B208	1232 L	23.5	30.	0.0022	0.0094
1409088PCM_36		385 mm <sup>2</sup>	100			
NEOB-37	B2 Plumbing Shop	1440 L	< 5.5	< 7.0	0.0019	< 0.0019
1409088PCM_37		385 mm <sup>2</sup>	100			
NEOB-38	B2 Main Break Area	1424 L	< 5.5	< 7.0	0.0019	< 0.0019
1409088PCM_38		385 mm <sup>2</sup>	100			
NEOB-39	B2 Corridor by SB-234	1360 L	10	13	0.0020	0.0037
1409088PCM_39		385 mm <sup>2</sup>	100			
NEOB-40	B2 Steam Room	1388 L	10.5	13	0.0019	0.0036
1409088PCM_40		385 mm <sup>2</sup>	100			

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Matt Thomas (52)

Analyst

Approved Signatory





# Airborne Fiber Analysis

By Phase Contrast Microscopy  
NIOSH 7400, Issue 2, (A Counting Rules)



**Customer:** Mabbett & Associates  
1940 Duke St #200  
Alexandria, VA 22314

**Attn:** Timothy Kenny  
Damien Hammond

**Lab Order ID:** 1409088

**Analysis ID:** 1409088\_PCM

**Date Received:** 5/19/2014

**Project:** GSA NEOB Fiber in Air Survey

**Date Reported:** 5/19/2014

Sample ID	Description	Volume	Fibers	Filter	LOD	Conc.
Lab Sample ID	Lab Notes	Filter Area	Fields	( Fibers / mm <sup>2</sup> )	( Fibers / cc )	( Fibers / cc )
NEOB-41	B2 SB-112 Break Room	1380 L	< 5.5	< 7.0	0.0020	< 0.0020
1409088PCM_41		385 mm <sup>2</sup>	100			
NEOB-42	G-008 Hallway	1376 L	21.5	27	0.0020	0.0076
1409088PCM_42		385 mm <sup>2</sup>	100			
NEOB-43	G Level by Courtyard	1372 L	22	28	0.0020	0.0079
1409088PCM_43		385 mm <sup>2</sup>	100			
NEOB-44	G-202 Hallway	1356 L	23	29	0.0020	0.0082
1409088PCM_44		385 mm <sup>2</sup>	100			
NEOB-45	G Level by Bike Shop	1356 L	< 5.5	< 7.0	0.0020	< 0.0020
1409088PCM_45		385 mm <sup>2</sup>	100			
NEOB-46	G-211 Break Room	1368 L	5.5	7.0	0.0020	0.0020
1409088PCM_46		385 mm <sup>2</sup>	100			
NEOB-47	2nd Floor 2200B Yoga Room	1364 L	28	36	0.0020	0.010
1409088PCM_47		385 mm <sup>2</sup>	100			
NEOB-48	BLANK	0 L	< 5.5	< 7.0	N/A	N/A
1409088PCM_48		385 mm <sup>2</sup>	100			

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Matt Thomas (52)

Analyst

Approved Signatory



# Airborne Fiber Analysis

By Phase Contrast Microscopy  
NIOSH 7400, Issue 2, (A Counting Rules)



**Customer:** Mabbett & Associates  
1940 Duke St #200  
Alexandria, VA 22314

**Attn:** Timothy Kenny  
Damien Hammond

**Lab Order ID:** 1409088

**Analysis ID:** 1409088\_PCM

**Date Received:** 5/19/2014

**Project:** GSA NEOB Fiber in Air Survey

**Date Reported:** 5/19/2014

Sample ID	Description	Volume	Fibers	Filter	LOD	Conc.
Lab Sample ID	Lab Notes	Filter Area	Fields	( Fibers / mm <sup>2</sup> )	( Fibers / cc )	( Fibers / cc )
NEOB-49	BLANK	0 L	< 5.5	< 7.0	N/A	N/A
1409088PCM_49		385 mm <sup>2</sup>	100			
NEOB-50	BLANK	0 L	< 5.5	< 7.0	N/A	N/A
1409088PCM_50		385 mm <sup>2</sup>	100			
NEOB-51	BLANK	0 L	< 5.5	< 7.0	N/A	N/A
1409088PCM_51		385 mm <sup>2</sup>	100			
NEOB-52	BLANK	0 L	< 5.5	< 7.0	N/A	N/A
1409088PCM_52		385 mm <sup>2</sup>	100			


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Matt Thomas (52)

Analyst

Approved Signatory

1409088

<b>Client:</b> <b>Contact:</b> Tim Kenny <b>Address:</b> 1940 Duke St. Ste. 200 Alexandria, VA 22314 <b>Phone:</b> 703-486-5680 <b>Fax:</b> [Enter fax here] <b>Email:</b> kenny@mabbett.com <b>Project:</b> cc: hammond@mabbett.com GSA NEOB Fiber in Air Survey <b>Client Notes:</b> Invoice at GSA approved fees. If any sample results are positive please notify Damien Hammond at 314-324-6042 immediately. <b>P.O. #:</b> 2012011.043 <b>Date Submitted:</b> 5/16/2014 <b>Analysis:</b> PCM NIOSH 7400 <b>Turnaround Time:</b> 24 Hours	<b>"InsNEOBuctions:</b> Use Column "B" for your contact info  To See an Example Click the bottom Example Tab.  Enter samples between "<<" and ">>" Begin Samples with a "<<" above the first sample and end with a ">>" below the last sample.  Only Enter your data on the first sheet "Sheet1" Note: Data 1 and Data 2 are optional fields that do not show up on the official report, however they will be included in the elecNEOBonic data returned to you to facilitate your reintegration of the report data.	 <b>Scientific Analytical Institute</b>  4604 Dundas Drive Greensboro, NC 27407 Phone: 336.292.3888 Fax: 336.292.3313 Email: lab@sailab.com
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Sample Number	Data 1 - Volume (L)	Sample Description	Data 2 - Date
---------------	---------------------	--------------------	---------------

NEOB-1	1263.5	10th Floor 10116 Copy Room	5/12/2014
NEOB-2	1256.5	10th Floor S. Levenbach Office	5/12/2014
NEOB-3	1260	10th Floor S. Martinez	5/12/2014
NEOB-4	1253	10th Floor 10021 Copy Room	5/12/2014
NEOB-5	1235.5	10th Floor 10001 Conference Room	5/12/2014
NEOB-6	1228.5	9th Floor 9116 Copy Room	5/12/2014
NEOB-7	1228.5	9th Floor 9208 Vacant Office	5/12/2014
NEOB-8	1225	9th Floor 9208E Office	5/12/2014
NEOB-9	1221.5	9th Floor 9025 Office	5/12/2014
NEOB-10	1225	9th Floor 9002 Office	5/12/2014
NEOB-11	1388	8th Floor 8208 S. Widor Office	5/12/2014
NEOB-12	1392	8th Floor 8208 C. Hurban Office	5/12/2014
NEOB-13	1380	8th Floor 8018 FileRoom	5/12/2014
NEOB-14	1368	8th Floor 8001 Lobby	5/12/2014
NEOB-15	1352	7th Floor 7213 Copy Room	5/12/2014



**Accepted**



**Rejected**

Wendy @ 5/19/14 9:35 AM

1409088

NEOB-16	1336	7th Floor 7235 Suite	5/12/2014
NEOB-17	1336	7th Floor 7026 Lobby	5/12/2014
NEOB-18	1332	7th Floor 7005 Lobby	5/12/2014
NEOB-19	1336	6th Floor 6116 Office	5/12/2014
NEOB-20	1312	6th Floor 6202 Office	5/12/2014
NEOB-21	1256	6th Floor 6226 Lobby	5/12/2014
NEOB-22	1256	6th Floor 6025 Lobby	5/12/2014
NEOB-23	1252	6th Floor 6001 Office	5/12/2014
NEOB-24	1240	5th Floor Outside 2050	5/12/2014
NEOB-25	1236	5th Floor Outside 5001	5/12/2014
NEOB-26	1208	4th Floor Outside 4208	5/12/2014
NEOB-27	1208	4th Floor Outside 4217	5/12/2014
NEOB-28	1208	4th Floor Elevator Lobby	5/12/2014
NEOB-29	1260	2nd Floor GSA Office	5/13/2014
NEOB-30	1444	2nd Floor Gym	5/13/2014
NEOB-31	1246	2nd Floor Cafeteria	5/13/2014
NEOB-32	1253	B1 Carpenter Break Room	5/13/2014
NEOB-33	1225	B1 Sheet Metal Shop	5/13/2014
NEOB-34	1218	B1 Engineer Shop	5/13/2014
NEOB-35	1218	B1 Elevator Shop Break Room	5/13/2014
NEOB-36	1232	B1 Corridor by B208	5/13/2014
NEOB-37	1440	B2 Plumbing Shop	5/13/2014
NEOB-38	1424	B2 Main Break Area	5/13/2014
NEOB-39	1360	B2 Corridor by SB-234	5/13/2014
NEOB-40	1388	B2 Steam Room	5/13/2014
NEOB-41	1380	B2 SB-112 Break Room	5/13/2014
NEOB-42	1376	G-008 Hallway	5/13/2014
NEOB-43	1372	G Level by Courtyard	5/13/2014
NEOB-44	1356	G-202 Hallway	5/13/2014
NEOB-45	1356	G Level by Bike Shop	5/13/2014
NEOB-46	1368	G-211 Break Room	5/13/2014
NEOB-47	1364	2nd Floor 2200B Yoga Room	5/13/2014
NEOB-48		BLANK	5/13/2014
NEOB-49		BLANK	5/13/2014
NEOB-50		BLANK	5/13/2014
NEOB-51		BLANK	5/13/2014
NEOB-52		BLANK	5/13/2014



# Airborne Asbestos Analysis

By Transmission Electron Microscopy  
AHERA Methodology (40 CFR, Part 763, Subpart E, Appendix A)



**Customer:** Mabbett & Associates  
1940 Duke St #200  
Alexandria, VA 22314

**Attn:** Timothy Kenny  
Damien Hammond

**Lab Order ID:** 1409679

**Analysis ID:** 1409679\_AHE

**Date Received:** 5/28/2014

**Project:** GSA NEOB Fiber in Air Survey

**Date Reported:** 5/28/2014

Sample ID	Description	Volume	Analytical Sensitivity Str/cc	Asbestos Structures	Raw Structure Count	Concentration Str/cc	Loading Str/mm <sup>2</sup>
Lab Sample ID	Lab Notes	Filter Area Area Analyzed					
NEOB-31	2nd floor cafeteria	1246 L	0.00483	Total Asbestos: Chrysotile >0.5 to <5.0um ≥5.0um	1 1 0 1	0.00483 0.00483 <0.00483 0.00483	15.6 15.6 <15.6 15.6
		385 mm <sup>2</sup>					
		0.0640 mm <sup>2</sup>					
1409679AHE_1							
NEOB-47	2nd floor 2200B yoga room	1364 L	0.00441	None Detected		<0.00441	<15.6
		385 mm <sup>2</sup>					
		0.0640 mm <sup>2</sup>					
1409679AHE_2							


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Matt Thomas (2)

Analyst

Approved Signatory

14091679  
1409088

<b>Client:</b> <b>Contact:</b> <b>Address:</b>  <b>Phone:</b> <b>Fax:</b> <b>Email:</b>  <b>Project:</b>  <b>Client Notes:</b>	Mabbett & Associates Tim Kenny 1940 Duke St. Ste. 200 Alexandria, VA 22314 703-466-5680 [Enter fax here] kenny@mabbett.com cc: hammond@mabbett.com GSA NEOB Fiber in Air Survey  Invoice at GSA approved fees. If any sample results are positive please notify Damien Hammond at 314-324-6042 immediately. 2012011:043 5/16/2014  PCM NIOSH 7400 24 Hours	<p><b>"InsNEOBuctions:</b>  Use Column "B" for your contact info</p> <p>To See an Example Click the  bottom Example Tab.</p> <p>Enter samples between "&lt;&lt;" and "&gt;&gt;"  Begin Samples with a "&lt;&lt;" above the first sample  and end with a "&gt;&gt;" below the last sample.</p> <p>Only Enter your data on the first sheet "Sheet1"  Note: Data 1 and Data 2 are optional  fields that do not show up on the official  report, however they will be included  in the elecNEOBonic data returned to you  to facilitate your reintegration of the report data.</p>	 Scientific Analytical Institute  4604 Dundas Drive Greensboro, NC 27407 Phone: 336.292.3888 Fax: 336.292.3313 Email: lab@sailab.com
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Sample Number	Data 1 - Volume (L)	Sample Description	Data 2 - Date
---------------	---------------------	--------------------	---------------

NEOB-1	1263.5	10th Floor 10116 Copy Room	5/12/2014
NEOB-2	1256.5	10th Floor S. Levenbach Office	5/12/2014
NEOB-3	1260	10th Floor S. Martinez	5/12/2014
NEOB-4	1253	10th Floor 10021 Copy Room	5/12/2014
NEOB-5	1235.5	10th Floor 10001 Conference Room	5/12/2014
NEOB-6	1228.5	9th Floor 9116 Copy Room	5/12/2014
NEOB-7	1228.5	9th Floor 9208 Vacant Office	5/12/2014
NEOB-8	1225	9th Floor 9208E Office	5/12/2014
NEOB-9	1221.5	9th Floor 9025 Office	5/12/2014
NEOB-10	1225	9th Floor 9002 Office	5/12/2014
NEOB-11	1388	8th Floor 8208 S. Widor Office	5/12/2014
NEOB-12	1392	8th Floor 8208 C. Hurban Office	5/12/2014
NEOB-13	1380	8th Floor 8018 FileRoom	5/12/2014
NEOB-14	1368	8th Floor 8001 Lobby	5/12/2014
NEOB-15	1352	7th Floor 7213 Copy Room	5/12/2014



**Accepted**



**Rejected**

*Handwritten signature and date: 5/19/14 9:35 AM*

1336  
1336  
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[illegible]

6296041  
~~8806071~~

**Attachment B**

**Sampling Data**



## Asbestos Air Sample Data Form

Activity:

F14

Date 5-12-14

IH:

JSH TJK

Client &amp; Sampling Location:

NEOB

Analyst:

Project No.:

Analytical Method:

Calibrator/Rotameter Type &amp; Number

Sample ID	Pump ID	Person Sampled/Sample Location	Flow Rate Pre:	Flow Rate Post:	Start Time	Stop Time	Sample Duration	Volume* (L)	Fibers/Fields	Fibers/cc
NEOB 1	39	IDE 10116 Corp room	3.5	3.5	7:29	0130	3:01	1263.5		
NEOB 2	34	IDE S. Marchner Office	3.5	3.5	7:30	0131	3:59	1256.5		
NEOB 3	17	IDE S. Marchner Office	3.5	3.5	7:35	0135	3:40	1240		
NEOB 4	25	IDE 10021 Corp	3.5	3.5	7:38	0136	3:58	1253		
NEOB 5	18	IDE 10001 Conf. Room	3.5	3.5	7:45	0138	3:53	1235.5		
NEOB 6	29	IDE 9116 Corp Room	3.5	3.5	7:50	0141	3:51	1228.5		
NEOB 7	30	IDE 9208 Warehouse Office	3.5	3.5	7:52	0143	3:51	1228.5		
NEOB 8	41	IDE 9208E Office	3.5	3.5	7:55	0145	3:50	1225		
NEOB 9	40	IDE 9025 Office	3.5	3.5	7:58	0147	3:49	1221.5		
NEOB 10	14	IDE 9002	4	4	0759	0149	3:50	1225		

\*Volume is based on the lower of the pre and post calibration flow rates

Comments:

①

# Asbestos Air Sample Data Form

Activity: F14 Date: 5-12-14

IH: JSK TSK

Client & Sampling Location: NEOS

Analyst: \_\_\_\_\_

Project No.: \_\_\_\_\_

Analytical Method: \_\_\_\_\_

Calibrator/Rotameter Type & Number \_\_\_\_\_

Sample ID	Pump ID	Person Sampled/Sample Location	Flow Rate Pre:	Flow Rate Post:	Start Time	Stop Time	Sample Duration	Volume* (L)	Fibers/Fields	Fibers/cc
NEOS-11	139	8F 8208 S. W. 10th St.	4	4	0804	0151	347	1368		
NEOS-12	410	8F 8208 C. 10th St.	4	4	0806	0154	348	1392		
NEOS-13	743	8F 8018 Fiberson	4	4	0811	0156	345	1380		
NEOS-14	744	8F 8001 Fiberson	4	4	0815	0157	342	1368		
NEOS-15	851	7F 723 C. 10th St.	4	4	0820	0158	338	1352		
NEOS-16	866	7F 723 S. 10th St.	4	4	0825	0159	334	1336		
NEOS-17	444	7F 7024	4	4	0828	0202	334	1336		
NEOS-18	445	7F 7005	4	4	0832	0205	333	1332		
NEOS-19	418	6F 6116	4	4	0836	0210	334	1336		
<del>NEOS-20</del>	<del>89</del>	<del>6F 6200</del>	<del>4</del>	<del>4</del>	<del>0840</del>					

\*Volume is based on the lower of the pre and post calibration flow rates

Comments:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

JSK

(2)

# Asbestos Air Sample Data Form

Activity: F1A Date: 5-12-14

IR: MSH TDK

Client & Sampling Location: NEBR

Analyst: \_\_\_\_\_

Project No.: \_\_\_\_\_

Analytical Method: \_\_\_\_\_

Calibrator/Rotameter Type & Number \_\_\_\_\_

Sample ID	Pump ID	Person Sampled/Sample Location	Flow Rate Pre:	Flow Rate Post:	Start Time	Stop Time	Sample Duration	Volume* (L)	Fibers/ Fields	Fibers/ cc
NEBR 20	05	6f 6202	4	4	08:40	0208	228	1312		
NEBR 21	15	6f 6206 lobby	4	4	0855	0209	314	1256		
NEBR 22	7	6f 6025 lobby	4	4	0857	0211	314	1256		
NEBR 23	53	6f 6001 office	4	4	0900	0213	4313	1252		
NEBR 24	8	5F outside 5030	4	4	0905	0215	310	1240		
NEBR 25	13	5F outside <del>5001</del>	4	4	0908	0217	309	1236		
NEBR 26	55	4f outside 4208	4	4	0915	0219	302	1208		
NEBR - 27	0617	4f outside 4217	4	4	0917	0219	302	1208		
NEBR 28	4	4f elevator lobby	4	4	0920	0222	302	1208		
NEBR 29	<del>17</del>	2f 6204 <del>5030</del>	35	35	0718	0115	360	1260		

\*Volume is based on the lower of the pre and post calibration flow rates

Comments:

NEBR

5-13-14

3

## Asbestos Air Sample Data Form

Activity: F1ADate: 5-13-14IH: ASH TSLClient & Sampling Location: LEOR

Analyst: \_\_\_\_\_

Project No.: \_\_\_\_\_

Analytical Method: \_\_\_\_\_

Calibrator/Rotameter Type &amp; Number \_\_\_\_\_

Sample ID	Pump ID	Person Sampled/Sample Location	Flow Rate Pre:	Flow Rate Post:	Start Time	Stop Time	Sample Duration	Volume* (L)	Fibers/Fields	Fibers/cc
LEOR-30	<del>30</del>	26 GYM	4	4	0718	0919	361	1444		
LEOR-31	30	26 Cafeteria	3.5	3.5	0725	0921	356	1246		
LEOR-32	40	81 Carpenter Bank	3.5	3.5	0733	0931	358	1253		
LEOR-33	25	81 Street level Shop	3.5	3.5	0735	0925	350	1225		
LEOR-34	17	81 <del>Street level Shop</del> <sup>Engineer Shop</sup>	3.5	3.5	0738	0926	348	1218		
LEOR-35	39	81 Elevator Shop	3.5	3.5	0740	0928	348	1218		
LEOR-36	480	81 Gym by Room	3.5	3.5	0741	0933	352	1232		
LEOR-37	15	82 Plumbing Shop	4	4	0745	0945	360	1440		
LEOR-38	4	82 <del>Plumbing Shop</del> <sup>Area file</sup>	4	4	0800	0946	356	1424		
LEOR-39	758	82 by SR-234	4	4	0955	0935	346	1360		

\*Volume is based on the lower of the pre and post calibration flow rates

Comments: \_\_\_\_\_

④

# Asbestos Air Sample Data Form

Activity: F1A Date: 5-13-14

IR: JSK TJK

Client & Sampling Location: NEOB

Analyst: \_\_\_\_\_

Project No.: \_\_\_\_\_

Analytical Method: \_\_\_\_\_

Calibrator/Rotameter Type & Number \_\_\_\_\_

Sample ID	Pump ID	Person Sampled/Sample Location	Flow Rate Pre:	Flow Rate Post:	Start Time	Stop Time	Sample Duration	Volume* (L)	Fibers/Fields	Fibers/cc
NEOB 40	99D	B2-Stream Room	4	4	0756	0143	347	1388		
NEOB 41	07	B2 SB-112	4	4	0800	0145	345	1380		
NEOB 42	53	G-202 HCU	4	4	0803	0147	344	1376		
NEOB 43	494	G-202 by courtyard	4	4	0805	0148	343	1372		
NEOB 44	8	G-202 HCU	4	4	0811	0150	339	1356		
NEOB 45	617	G-1001 by bike shed	4	4	0813	0150	339	1356		
NEOB 46	14	G-211 Breakroom	4	4	0815	0155	342	1368		
NEOB 47	405	2F 2200B	4	4	0816	0157	341	1364		
NEOB 48		Blank								
NEOB 49		Blank								

\*Volume is based on the lower of the pre and post calibration flow rates

Comments:

5

Activity:	Date	IH:
1	3-19	2
17	3-19	1
		6

Date 5-13-14

III. 1919

Client & Sampling Location: WGS

Analyst: \_\_\_\_\_

Analyst: \_\_\_\_\_

Project No.: \_\_\_\_\_

Analytical Method: \_\_\_\_\_

Analytical Method:

Calibrator/Rotameter Type & Number

[illegible]

\*Volume is based on the lower of the pre and post calibration flow rates

Comments:





# Annual Asbestos Operations and Maintenance Inspection Report

## New Executive Office Building (DC0105ZZ)

Conducted September 25, 2012  
Project No. 2009028.075  
September 28, 2012

Prepared for



**U.S. General Services Administration**

National Capitol Region Service Delivery Support  
Safety, Environment, & Fire Branch  
7<sup>th</sup> and D Sts SW, Room 2080  
Washington, DC 20407

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September 28, 2012

Mr. James Hodges, CHMM  
Industrial Hygienist  
General Services Administration (GSA)  
Safety, Environment, & Fire Protection Branch  
7<sup>th</sup> & D Streets, SW, Room 2080  
Washington, D.C. 20407

Subject: **Annual Asbestos Operations and Maintenance Inspection Report  
New Executive Office Building (DC0105ZZ)**

Contract No.: GS-11P-07-YA-D-0036B

Order No.: GS-P-11-12-DC-0071

Mabbett Project No.: 2009028.075

Dear Mr. Hodges:

Mabbett & Associates, Inc. (Mabbett™) received a request from GSA, NCR, Service Delivery Support Safety, Environmental, and Fire Protection Branch to conduct the annual asbestos operations and maintenance (O&M) inspection within twenty-seven (27) GSA facilities. This report summarizes the results of the inspection conducted at the New Executive Office Building located at 725 17th St. NW, Washington D.C.

Mabbett Industrial Hygienists Jon Nicoll, Robert McKinley, Andrew Gronan and Damien Hammond performed the inspection on September 25, 2012. The inspection and sampling were performed in accordance with GSA and Asbestos Hazard and Emergency Response Act (AHERA) protocols.

## **Executive Summary**

Copies of the existing asbestos O&M reports containing locations and quantities of previously identified asbestos containing building materials (ACBM) were provide by GSA. Those areas were visually inspected to determine if the ACBM were still present, the quantity remaining, and the condition of the material. A visual inspection of the entire building was also conducted to identify materials that were not previously determined to contain asbestos. Suspect ACBM were sampled and quantified. Samples collected were shipped to Scientific Analytical Institute Inc. (SAI) of Greensboro, North Carolina. SAI is accredited by the American Industrial Hygiene Association (AIHA) and participates in the National Voluntary Laboratory Accreditation Program (NVLAP) for asbestos analyses.

There was no significantly damaged ACBM found in the building. Two homogenous areas were found with damaged ACBM. Approximately 150 linear feet (LF) of damaged thermal systems insulation was found distributed throughout the penthouse, sub basement and compressor room. Also, approximately 50 square feet (ft<sup>2</sup>) of damaged floor tile was found in Rooms 10116, 6113, and 6203. All remaining ACBM were in good condition and should be periodically inspected in accordance with AHERA guidelines.



A total of 18 samples of suspect ACBM were collected from six newly identified homogeneous areas. Laboratory analysis results confirmed three new homogenous areas were ACBM. Homogeneous areas with ACBM are summarized in the O&M Surveillance and Report Form contained in Attachment A of this report. Detailed inspection and sampling information is contained in Attachment B, Asbestos Assessment Data Forms, and Attachment C, Laboratory Analysis Report.

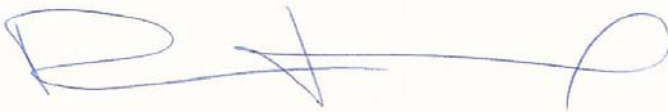
A few building areas were inaccessible during this inspection due to security restrictions. Due to office occupants being present, areas above the suspended ceiling tiles were not always accessible during the inspection. All suspect materials not evaluated are assumed to contain asbestos. All ACBM quantities reported are estimates only.

Mabbett appreciates this opportunity to provide these asbestos consulting services for GSA, NCR. Should you have any questions or concerns, please do not hesitate to contact us at (703) 486-5680.

Very truly yours,

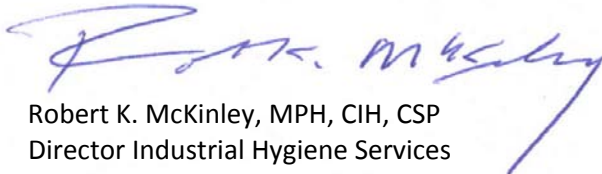
MABBETT & ASSOCIATES, INC.

BY:

A handwritten signature in blue ink, appearing to read 'D. Hammond', is written over a light yellow rectangular background.

Damien Hammond, MS  
Sr. Industrial Hygienist

Reviewed by:

A handwritten signature in blue ink, appearing to read 'Robert K. McKinley', is written over a light yellow rectangular background.

Robert K. McKinley, MPH, CIH, CSP  
Director Industrial Hygiene Services

Attachment A: O&M Inventory and Surveillance Report Form

Attachment B: Asbestos Assessment Data Forms

Attachment C: Laboratory Analysis Results

## Attachment A

### O&M Inventory and Surveillance Report Form

## ASBESTOS INVENTORY AND PERIODIC SURVEILLANCE ASSESSMENT REPORT

BUILDING NAME: New Executive Office Building (NEOB)  
 BUILDING ADDRESS: 725 17th street nw Washington DC  
 INSPECTOR: James Hodges  
 ASBESTOS PROGRAM MANAGER: James Hodges

GSA BUILDING NUMBER: DC0105ZZ  
 DATE OF INSPECTION: 9/25/12  
 DATE SUBMITTED TO WPMACB:

LOCATION(S) OF ACBM FLOOR/ROOM	HOMOGENEOUS MATERIAL	QUANTITY OF ACBM	FRIABLE YES/NO	CONDITION <sup>1</sup>	CAUSE OF DAMAGE <sup>2</sup>	QUANTITY OF DAMAGE (S.F./L.F.)	RECOMMENDED RESPONSE ACTION(S) <sup>3</sup>	DATE RESPONSE ACTION(S) COMPLETED
Sub Basement, Parking Garage	Mudded Elbows	100 EA	Yes	Good	N/A	N/A	O&M	
Sub Basement Compressor Room, Penthouse	Pipe Insulation	4030 LF	Yes	Damaged	Vibration	150 LF	O&M	
Outside G-112, Outside Library	Plaster	800 SF	No	Good	N/A	N/A	O&M	
Ground Floor Mechanical Room G117	Tank Insulation	500 SF	Yes	Good	N/A	N/A	O&M	
Basement, Elevator Lobbies Floors 8-10	Spray-on Fire Proofing	22000 SF	Yes	Good	N/A	N/A	O&M	
West and East Penthouse	AHU Mastic	1000 SF	No	Good	N/A	N/A	O&M	
West and East Penthouse	AHU Insulation	10000 SF	Yes	Good	N/A	N/A	O&M	
Floors 2 and 10	Fire Doors	20 EA	No	Good	N/A	N/A	O&M	
East Penthouse	Black Floor Tile Mastic	5000 SF	No	Good	N/A	N/A	O&M	
Rooms 10116, 10021, 9101, 6113, 6203; Ground Floor Mechanical Room G117	9x9 grey Floor Tile and Black Mastic	900 SF	No	Good	N/A	N/A	O&M	
B227, B226, B206	Floor Tile and Mastic	1200 SF	No	Damaged	Traffic	50 SF	O&M	

<sup>1</sup> GOOD, DAMAGED OR SIGNIFICANTLY DAMAGED

<sup>2</sup> AIR EROSION, VANDALISM, VIBRATION, WATER, ETC.

<sup>3</sup> REPAIR, REMOVE, ENCAPSULATE, ENCLOSE, OR O&M

## Attachment B

### Asbestos Assessment Data Forms

## ASBESTOS ASSESSMENT DATA FORM

BLDG NAME: NEOB  
ADDRESS: 725 17th ST NW DC  
GSA BLDG NO.: DC 010522

ASSESSMENT DATE: 9/25/12  
AMOUNT(S.F./L.F.) 100 EACH

Location In Bldg: Sub basement, Parking garage  
(include Functional Space)

HOMOGENEOUS AREA: Muddled Elbows

Type of Material  
 \_\_\_ Fireproofing  
 \_\_\_ Acoustical Plaster  
 \_\_\_ Acoustical Tile  
☒ Thermal Systems Insulation  
 \_\_\_ Vinyl Floor Tile  
 \_\_\_ Other: \_\_\_\_\_

Damage  
\_\_\_\_ Significant  
\_\_\_\_\_ Minor  
✗ None

Accessibility  
 \_\_\_ High  
       Medium  
 .....  
 X Low

Air Plenum (Y or ~~N~~)

Friability  
X High  
 \_\_\_\_\_ Medium  
 \_\_\_\_\_ Low

Traffic \_\_\_\_\_  
X Medium \_\_\_\_\_  
 Low \_\_\_\_\_

Vibration  
h  
X Medium  
Low

Potential for Air Erosion

\_\_\_ High      \_\_\_ High

☒ Moderate

\_\_\_ Low

Comments:

AHERA Classification (see instructions): §

<u>Sample Number</u>	<u>Sample location</u>	<u>Result</u>
(Include percent and type of asbestos in result, e.g. 50% Chrysotile).		

[illegible]

## ASBESTOS ASSESSMENT DATA FORM

BLDG NAME: NEOB  
ADDRESS: 725 17th ST NW DC  
GSA BLDG NO.: DC 610522

ASSESSMENT DATE: 9/25/12  
AMOUNT(S.F./L.F.) 4030 LF

Location In Bldg: Sub Basement, Compressor room, Penthouse  
(include Functional Space)

HOMOGENEOUS AREA: PIPE Insulation

Type of Material  
 \_\_\_ Fireproofing  
 \_\_\_ Acoustical Plaster  
 \_\_\_ Acoustical Tile  
☒ Thermal Systems Insulation  
 \_\_\_ Vinyl Floor Tile  
 \_\_\_ Other: \_\_\_\_\_

Damage  
\_\_\_\_ Significant  
      X Minor  
\_\_\_\_ None

Accessibility  
 \_\_\_ High  
       ✕ Medium  
       .....  
       \_\_\_ Low

Air Plenum (Y or ☒ N)

Friability  
X High  
..... Medium  
..... Low

Traffic \_\_\_\_\_  
 \_\_\_\_\_ High  
X Medium  
 \_\_\_\_\_ Low

Vibration  
h  
\_XMedium  
\_Low

Potential for Air Erosion  
\_\_\_High \_\_\_High  
☒Moderate  
\_\_\_Low

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Comments:

AHERA Classification (see instructions): 5

<u>Sample Number</u>	<u>Sample location</u>	<u>Result</u>
(Include percent and type of asbestos in result, e.g. 50% Chrysotile).		

[illegible]

## ASBESTOS ASSESSMENT DATA FORM

BLDG NAME: NEOB  
ADDRESS: 725 17th ST NW DC  
GSA BLDG NO.: DC 610522

ASSESSMENT DATE: 9/25/12  
AMOUNT(S.F./L.F.) 800SF

Location In Bldg: Outside 6-112, Outside Library  
(include Functional Space)

HOMOGENEOUS AREA: Plaster

Type of Material  
☐ Fireproofing  
☐ Acoustical Plaster  
☐ Acoustical Tile  
☐ Thermal Systems Insulation  
☐ Vinyl Floor Tile  
☒ Other: \_\_\_\_\_

Damage  
\_\_\_ Significant  
X None Minor

Accessibility  
☐ High  
☐ Medium  
☒ Low

Air Plenum \_\_\_\_\_  
(Y or N)

Friability  
 \_\_\_ High  
 \_\_\_ Medium  
X Low

Traffic \_\_\_\_\_  
 \_\_\_\_\_ High  
X Medium  
 \_\_\_\_\_ Low

Vibration  
Medium  
 $\bar{X}_{Low}$

Potential for Air Erosion

\_\_\_High                      \_\_\_High  
X Moderate  
\_\_\_Low

Comments: \_\_\_\_\_

AHERA Classification (see instructions): 5

<u>Sample Number</u>	<u>Sample location</u>	<u>Result</u>
(Include percent and type of asbestos in result, e.g. 50% Chrysotile).		

[illegible]

## ASBESTOS ASSESSMENT DATA FORM

BLDG NAME: NEOB  
ADDRESS: 725 17th ST NW DC  
GSA BLDG NO.: DC 610522

ASSESSMENT DATE: 9/25/12  
AMOUNT(S.F./L.F.) 500 SF

Location In Bldg: Sub basement SB214  
(include Functional Space)

HOMOGENEOUS AREA: Tank insulation

Type of Material  
 \_\_\_ Fireproofing  
 \_\_\_ Acoustical Plaster  
 \_\_\_ Acoustical Tile  
☒ Thermal Systems Insulation  
 \_\_\_ Vinyl Floor Tile  
 \_\_\_ Other: \_\_\_\_\_

Damage  
\_\_\_ Significant  
\_\_\_\_\_ Minor  
~~\_\_\_~~ None

Accessibility  
☐ High  
☐ Medium  
☒ Low

Air Plenum \_\_\_\_\_  
(Y or N)

Friability  
X High  
..... Medium  
Low

Traffic \_\_\_\_\_  
 X Medium  
 Low

Vibration  
h  
X Medium  
Low

Potential for Air Erosion  
 \_\_\_Low ☒ Moderate \_\_\_High

Comments: \_\_\_\_\_

AHERA Classification (see instructions): 5

<u>Sample Number</u>	<u>Sample location</u>	<u>Result</u>
(Include percent and type of asbestos in result, e.g. 50% Chrysotile).		

3A SB214 Tank insulation 65% chrysotile

3B stop +

3C

\_\_\_\_\_

\_\_\_\_\_

.....

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
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## ASBESTOS ASSESSMENT DATA FORM

BLDG NAME: NEOB  
ADDRESS: 725 17th ST NW DC  
GSA BLDG NO.: DC 610522

ASSESSMENT DATE: 9/25/12  
AMOUNT(S.F./L.F.) 22000 SF

Location In Bldg: Basement, Elevator Lobbies floors 10-8  
(include Functional Space)

HOMOGENEOUS AREA: Spray on fire Proffing

Type of Material  
☒ Fireproofing  
☐ Acoustical Plaster  
☐ Acoustical Tile  
☐ Thermal Systems Insulation  
☐ Vinyl Floor Tile  
☐ Other: \_\_\_\_\_

Damage  
\_\_\_ Significant  
..... Minor  
☒ None

Accessibility  
 \_\_\_ High  
       Medium  
 .....  
 X Low

Air Plenum             
(Y or N)

Friability  
X High  
\_\_\_\_ Medium  
\_\_\_\_\_ Low

Traffic \_\_\_\_\_  
 \_\_\_\_\_ High  
☒ Medium  
☒ Low

Vibration  
h  
XMedium  
Low

Potential for Air Erosion

☐ High      ☒ Moderate      ☐ High

☐ Low

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

AHERA Classification (see instructions): 5

<u>Sample Number</u>	<u>Sample location</u>	<u>Result</u>
(Include percent and type of asbestos in result, e.g. 50% Chrysotile).		

[illegible]

## ASBESTOS ASSESSMENT DATA FORM

BLDG NAME: NEOB  
ADDRESS: 725 17th ST NW DC  
GSA BLDG NO.: DC 010522

ASSESSMENT DATE: 9/25/12

AMOUNT(S.F./L.F.) 1000 SF

Location In Bldg: Penthouse  
(include Functional Space)

HOMOGENEOUS AREA: Atto mastic

Type of Material

**Fireproofing**

## Acoustical Plaster

Acoustical Tile

## Thermal Systems Insulation

## Vinyl Floor Tile

**X** Other: \_\_\_\_\_

## Damage

Significant

Minor

X None

## Accessibility

High

Medium

.....  
X Low

Air Plenum

(Y or N)

### Friability

\_\_\_ High

Medium

 $\bar{X}_{Low}$ 

## Traffic

High

Medium

**X Low**

## Vibration

High

**X**Medium

Low

### Potential for Air Erosion

High

~~X~~Moderate

LOW

High

Comments: \_\_\_\_\_

AHERA Classification (see instructions): 5

Sample Number

### Sample location

### Result

(Include percent and type of asbestos in result, e.g. 50% Chrysotile).

[illegible]

## ASBESTOS ASSESSMENT DATA FORM

BLDG NAME: NEOB  
ADDRESS: 725 17th ST NW DC  
GSA BLDG NO.: DC 610522

ASSESSMENT DATE: 9/25/12  
AMOUNT(S.F./L.F.) 10000 SF

Location In Bldg: Penthouse  
(include Functional Space)

HOMOGENEOUS AREA: Attu Insulation

Type of Material  
☐ Fireproofing  
☐ Acoustical Plaster  
☐ Acoustical Tile  
☒ Thermal Systems Insulation  
☐ Vinyl Floor Tile  
☐ Other: \_\_\_\_\_

Damage  
 \_\_\_ Significant  
 \_\_\_ Minor  
☒ None

Accessibility  
☐ High  
☐ Medium  
☒ Low

Air Plenum  
(Y or ~~N~~)

Friability  
X High  
\_\_\_\_ Medium  
----- Low

Traffic \_\_\_\_\_  
 \_\_\_\_\_ High  
☒ Medium  
 \_\_\_\_\_ Low

Vibration  
h  
XMedium  
Low

Potential for Air Erosion

\_\_\_ High      \_\_\_ High

    X Moderate

    \_\_\_ Low

Comments: \_\_\_\_\_

AHERA Classification (see instructions): 5

<u>Sample Number</u>	<u>Sample location</u>	<u>Result</u>
(Include percent and type of asbestos in result, e.g. 50% Chrysotile).		

[illegible]

## ASBESTOS ASSESSMENT DATA FORM

BLDG NAME: NEOB  
ADDRESS: 725 17th ST NW DC  
GSA BLDG NO.: DC 610522

ASSESSMENT DATE: 9/25/12

AMOUNT(S.F./L.F.) 20 EA

Location In Bldg: 10 FL, 2 FL  
(include Functional Space)

HOMOGENEOUS AREA: Fire Doors

Type of Material

☐ Fireproofing

### Acoustical Plaster

.....Acoustical Tile

## Thermal Systems Insulation

## Vinyl Floor Tile

**X Other:** \_\_\_\_\_

## Damage

\_\_\_\_ Significant

Minor

☒ None

## Accessibility

XHigh

Medium

Low

Air Plenum (Y or **N**)

### Friability

\_\_\_ High

Medium

 $\chi_{\text{LOW}}$ 

Traffic

## Vibration

\_\_\_\_\_ High

**X Medium**

• Low

High

Medium

X Low

### Potential for Air Erosion

\_\_\_\_\_ High

~~X~~Moderate

Low

High

Comments: \_\_\_\_\_

AHERA Classification (see instructions): 5

Sample Number

Sample location

## Result

(Include percent and type of asbestos in result, e.g. 50% Chrysotile).

[illegible]

## ASBESTOS ASSESSMENT DATA FORM

BLDG NAME: NEOB  
ADDRESS: 725 17th ST NW DC  
GSA BLDG NO.: DC 610522

ASSESSMENT DATE: 9/25/12

AMOUNT(S.F./L.F.) 5000 SF

Location In Bldg: East Penthouse  
(include Functional Space)

HOMOGENEOUS AREA: Black floor tile mastic

Type of Material

**Fireproofing**

### Acoustical Plaster

Acoustical Tile

## Thermal Systems Insulation

         Vinyl Floor Tile

☒ Other: \_\_\_\_\_

## Damage

Significant

Minor

X None

## Accessibility

High

XMedium

Low

Air Plenum \_\_\_\_\_  
(Y or N)

### Friability

High

Medium

**X Low**

## Traffic

High

Medium

~~XXXXXX~~  
X LOW

## Vibration

\_\_\_ High  
dium Medium

 $\bar{X}_{Low}$ 

### Potential for Air Erosion

High

Moderate

~~X~~ LOW

High

Comments: \_\_\_\_\_

AHERA Classification (see instructions): 5

Sample Number

### Sample location

### Result

(Include percent and type of asbestos in result, e.g. 50% Chrysotile).

[illegible]



## Attachment C

### Laboratory Analysis Results



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
EPA Method: 600/R-93/116 and 600/M4-82-020



**Customer:** Mabbett & Associates  
1940 Duke St #200  
Alexandria, VA 22314

**Attn:** Robert Mckinley

**Lab Order ID:** 1215932

**Analysis ID:** 1215932PLM

**Date Received:** 9/27/2012

**Date Reported:** 9/28/2012

**Project:** NEOB O & M/ 2069028075

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
1A	East penthouse 12x12 green FT with black mastic	None Detected		100% Other	Green Non Fibrous Homogeneous
1215932PLM_1	tile only				Dissolved
1B - A	East penthouse 12x12 green FT with black mastic	None Detected		100% Other	Green Non Fibrous Homogeneous
1215932PLM_2	tile				Dissolved
1B - B	East penthouse 12x12 green FT with black mastic	6% Chrysotile		94% Other	Black Non Fibrous Homogeneous
1215932PLM_19	mastic				Dissolved
1C - A	East penthouse 12x12 green FT with black mastic	None Detected		100% Other	Green Non Fibrous Homogeneous
1215932PLM_3	tile				Dissolved
1C - B	East penthouse 12x12 green FT with black mastic	Not Analyzed			
1215932PLM_20	mastic				
2A - A	10F Rm 10021 9x9 grey FT with black mastic	4% Chrysotile		96% Other	Gray Non Fibrous Homogeneous
1215932PLM_4	tile				Dissolved
2A - B	10F Rm 10021 9x9 grey FT with black mastic	5% Chrysotile		95% Other	Black Non Fibrous Homogeneous
1215932PLM_21	mastic				Dissolved
2B - A	10F Rm 10021 9x9 grey FT with black mastic	Not Analyzed			
1215932PLM_5	tile				

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Bethany Nichols (26)

Analyst

Nathaniel Durham, MS or Approved Signatory

Scientific Analytical Institute, Inc. 4604 Dundas Dr. Greensboro, NC 27407 (336) 292-3888

Page 1 of 4





# Bulk Asbestos Analysis

By Polarized Light Microscopy  
EPA Method: 600/R-93/116 and 600/M4-82-020



**Customer:** Mabbett & Associates  
1940 Duke St #200  
Alexandria, VA 22314

**Attn:** Robert Mckinley

**Lab Order ID:** 1215932

**Analysis ID:** 1215932PLM

**Date Received:** 9/27/2012

**Date Reported:** 9/28/2012

**Project:** NEOB O & M/ 2069028075

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
2B - B	10F Rm 10021 9x9 grey FT with black mastic	Not Analyzed			
1215932PLM_26	mastic				
2C - A	10F Rm 10021 9x9 grey FT with black mastic	Not Analyzed			
1215932PLM_6	tile				
2C - B	10F Rm 10021 9x9 grey FT with black mastic	Not Analyzed			
1215932PLM_22	mastic				
3A	Sub basement SB 214 tank ins	65% Chrysotile		35% Other	Gray Fibrous Homogeneous
1215932PLM_7					Teased
3B	Sub basement SB 214 tank ins	Not Analyzed			
1215932PLM_8					
3C	Sub basement SB 214 tank ins	Not Analyzed			
1215932PLM_9					
4A - A	G-117 9x9 Grey FT with black mastic	4% Chrysotile		96% Other	Grayish Non Fibrous Homogeneous
1215932PLM_10	tile				Dissolved
4A - B	G-117 9x9 Grey FT with black mastic	8% Chrysotile		92% Other	Black Non Fibrous Homogeneous
1215932PLM_27	mastic				Dissolved

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# Bulk Asbestos Analysis

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EPA Method: 600/R-93/116 and 600/M4-82-020



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Alexandria, VA 22314

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**Lab Order ID:** 1215932

**Analysis ID:** 1215932PLM

**Date Received:** 9/27/2012

**Date Reported:** 9/28/2012

**Project:** NEOB O & M/ 2069028075

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
4B - A	G-117 9x9 Grey FT with black mastic	Not Analyzed			
1215932PLM_11	tile				
4B - B	G-117 9x9 Grey FT with black mastic	Not Analyzed			
1215932PLM_28	mastic				
4C - A	G-117 9x9 Grey FT with black mastic	Not Analyzed			
1215932PLM_12	tile				
4C - B	G-117 9x9 Grey FT with black mastic	Not Analyzed			
1215932PLM_29	mastic				
5A	G-117 Duct vibration cloth	None Detected	90% Cellulose	10% Other	Black Fibrous Homogeneous
1215932PLM_13					Ashed
5B	G-117 Duct vibration cloth	None Detected	90% Cellulose	10% Other	Black Fibrous Homogeneous
1215932PLM_14					Ashed
5C	G-117 Duct vibration cloth	None Detected	90% Cellulose	10% Other	Black Fibrous Homogeneous
1215932PLM_15					Ashed
6A	G-117 Drywall and joint compound	None Detected	15% Cellulose	85% Other	White, Tan, Gray Non Fibrous Heterogeneous
1215932PLM_16	drywall: none detect; joint compnd: none detect				Crushed

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Page 3 of 4



# Bulk Asbestos Analysis

By Polarized Light Microscopy  
EPA Method: 600/R-93/116 and 600/M4-82-020



**Customer:** Mabbett & Associates  
1940 Duke St #200  
Alexandria, VA 22314

**Attn:** Robert Mckinley

**Lab Order ID:** 1215932

**Analysis ID:** 1215932PLM

**Date Received:** 9/27/2012

**Date Reported:** 9/28/2012

**Project:** NEOB O & M/ 2069028075

Sample ID	Description	Asbestos	Fibrous Components	Non-Fibrous Components	Attributes
Lab Sample ID	Lab Notes				Treatment
6B	G-117 Drywall and joint compound	None Detected	15% Cellulose	85% Other	White, Tan, Gray Non Fibrous Heterogeneous
1215932PLM_17	drywall: none detect; joint compnd: none detect				Crushed
6C	G-117 Drywall and joint compound	None Detected	7% Cellulose	93% Other	Gray Non Fibrous Homogeneous
1215932PLM_18	drywall only				Crushed

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Bethany Nichols (26)

Analyst

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Page 4 of 4



**Scientific Analytical Institute**  
4604 Dundas Dr. Greensboro, NC 27407  
Phone: 336.292.3888 Fax: 336.292.3313  
www.sailab.com lab@sailab.com

Lab Use Only  
Lab Order ID: 1215932  
Client Code: \_\_\_\_\_

### Company Contact Information

Company: Mabbett & Associates  
Address: 1940 DUKE ST STE 200  
Alexandria VA 22314  
Contact: Bob McKinley  
Phone ☒: 703-486-5650  
Fax ☐:  
Email ☒: mckinley@mabbett.com

### Asbestos Test Types

PLM EPA 600/R-93/116	<input checked="" type="checkbox"/>
Positive stop	<input checked="" type="checkbox"/>
PLM Point Count	<input type="checkbox"/>
PCM NIOSH 7400	<input type="checkbox"/>
TEM AHERA	<input type="checkbox"/>
TEM Level II	<input type="checkbox"/>
TEM NIOSH 7402	<input type="checkbox"/>
TEM Bulk Qualitative	<input type="checkbox"/>
TEM Bulk Chatfield	<input type="checkbox"/>
TEM Bulk Quantitative	<input type="checkbox"/>
TEM Wipe ASTM D6480-99	<input type="checkbox"/>
TEM Microvac ASTM D5755-02	<input type="checkbox"/>
TEM Water EPA 100.2	<input type="checkbox"/>
Other:	<input type="checkbox"/>

### Billing/Invoice Information

### Turn Around Times

Company: Mabbett & Associates  
Contact: Korky Davis  
Address: 5 Alfred Circle  
Bedford MA 01730  
90 Min. ☐ 48 Hours ☐  
3 Hours ☐ 72 Hours ☐  
6 Hours ☐ 96 Hours ☐  
12 Hours ☐ 120 Hours ☐  
24 Hours ☒ 144+ Hours ☐

### PO Number:

Project Name/Number: NEOB O & M / 2069029075

Sample ID #	Description/Location	Volume/Area	Comments
1A	East Pent house 12x12' Green FT	5000 SF	
1B	W/BLACK mastic	↓	
1C		↓	
2A	10F RM 10021 9x9 Grey FT w/ BLACK mastic	100 SF	
2B			
2C			
3A	Sub basement 5B214 TANK FND		
3B			
3C			
4A	G-117 9x9 Grey FT w/ BLACK mastic		
4B			
4C			
5A	G-117 Duct vibration clots		
5B			
5C			

Total # of Samples 18

Relinquished by	Date/Time	Received by	Date/Time
Damien Hamard	9/26/12 8 AM	CBarrs	9-27 10:30

Page 1 of 2



Client Code: \_\_\_\_\_

NEOB  
L

**New Executive Office Building  
DC0105ZZ  
Asbestos Containing Building Materials Summary Report**

Sample #	H.A. #	Material Sampled	Sample Location	Analytical Result	Regulated ACM	Friable	Quantity
-1							
3-4-B31	1	Spray-on Fireproofing	Basement, garage ceiling	35-40% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B32	1	Spray-on Fireproofing	Basement, garage ceiling	30-35% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B33	1	Spray-on Fireproofing	Basement, garage ceiling	20-25% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B40	1	Spray-on Fireproofing	Carpentry shop, near loading dock on ceiling	25-30% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B41	1	Spray-on Fireproofing	Carpentry shop, near loading dock on ceiling	25-30% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B42	1	Spray-on Fireproofing	Carpentry shop, near loading dock on ceiling	35-40% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B46	1	Spray-on Fireproofing	Basement, rm. B112	20-25% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B47	1	Spray-on Fireproofing	Basement, rm. B112	30-35% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B48	1	Spray-on Fireproofing	Basement, rm. B112	30-35% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B49	1	Spray-on Fireproofing	Basement, at stair #2	30-35% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B50	1	Spray-on Fireproofing	Basement, at stair #2	30-35% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B51	1	Spray-on Fireproofing	Basement, at stair #2	30-35% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B1	1	Spray-on Fireproofing	Ground floor, rm. G211	20-25% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B2	1	Spray-on Fireproofing	Ground floor, rm. G211	25-30% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B3	1	Spray-on Fireproofing	Ground floor, rm. G211	25-30% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B7	1	Spray-on Fireproofing	Ground floor, rm. 236	Non-Detect	No	Yes	400,000 S. F.
3-4-B8	1	Spray-on Fireproofing	Ground floor, rm. 236	Non-Detect	No	Yes	400,000 S. F.
3-4-B9	1	Spray-on Fireproofing	Ground floor, rm. 236	Non-Detect	No	Yes	400,000 S. F.
3-4-B22	1	Spray-on Fireproofing	Ground floor, rm. G117	30-35% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B23	1	Spray-on Fireproofing	Ground floor, rm. G117	30-35% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B24	1	Spray-on Fireproofing	Ground floor, rm. G117	35-40% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B4	1	Spray-on Fireproofing	Third floor, rm. 3113	20-25% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B5	1	Spray-on Fireproofing	Third floor, rm. 3113	30-35% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B6	1	Spray-on Fireproofing	Third floor, rm. 3113	30-35% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B10	1	Spray-on Fireproofing	Third floor, rm. 3004	20-25% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B11	1	Spray-on Fireproofing	Third floor, rm. 3004	25-30% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B12	1	Spray-on Fireproofing	Third floor, rm. 3004	25-30% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B13	1	Spray-on Fireproofing	Fourth floor, rm. 4004	30-35% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B14	1	Spray-on Fireproofing	Fourth floor, rm. 4004	35-40% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B15	1	Spray-on Fireproofing	Fourth floor, rm. 4004	30-35% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B19	1	Spray-on Fireproofing	Fifth floor, rm. 5209	30-35% Chrysotile	Yes	Yes	400,000 S. F.

3-4-B21	1	Spray-on Fireproofing	Fifth floor, rm. 5209	25-30% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B22	1	Spray-on Fireproofing	Seventh floor, rm. 7205	35-40% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B23	1	Spray-on Fireproofing	Seventh floor, rm. 7205	25-30% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B24	1	Spray-on Fireproofing	Seventh floor, rm. 7205	15-20% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B25	1	Spray-on Fireproofing	Ninth floor, rm. 9205	20-25% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B26	1	Spray-on Fireproofing	Ninth floor, rm. 9205	20-25% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B27	1	Spray-on Fireproofing	Ninth floor, rm. 9205	30-35% Chrysotile	Yes	Yes	400,000 S. F.
3-4-B28	2	Fire Doors, All Floors	2nd floor	30-35% Chrysotile	Yes	Yes	1,800 S. F.
3-4-B29	2	Fire Doors, All Floors	2nd floor	30-35% Chrysotile	Yes	Yes	1,800 S. F.
3-4-B30	2	Fire Doors, All Floors	2nd floor	25-30% Chrysotile	Yes	Yes	1,800 S. F.
3-4-B31	2	Fire Doors, All Floors	10th floor	15-20% Chrysotile	Yes	Yes	1,800 S. F.
3-4-B32	2	Fire Doors, All Floors	10th floor	20-25% Chrysotile	Yes	Yes	1,800 S. F.
3-4-B33	2	Fire Doors, All Floors	10th floor	15-20% Chrysotile	Yes	Yes	1,800 S. F.
3-4-B10	3	Ceiling Plaster	Service elevator lobby	10-15% Chrysotile	Yes	Yes	600 S. F.
3-4-B11	3	Ceiling Plaster	Service elevator lobby	10-15% Chrysotile	Yes	Yes	600 S. F.
3-4-B12	3	Ceiling Plaster	Service elevator lobby	10-15% Chrysotile	Yes	Yes	600 S. F.
3-4-B13	3	Pipe Insulation	Entrance to elevator machine room (pit)	Non-Detect	No	Yes	600 S. F.
3-4-B14	3	Pipe Insulation	Entrance to elevator machine room (pit)	Non-Detect	No	Yes	600 S. F.
3-4-B15	3	Pipe Insulation	Entrance to elevator machine room (pit)	Non-Detect	No	Yes	600 S. F.
3-4-B43	4	Acoustical Plaster	Bsemnt, ceiling at freight elev. and loading dock	10-15% Chrysotile	Yes	Yes	1,500 S. F.
3-4-B44	4	Acoustical Plaster	Bsemnt, ceiling at freight elev. and loading dock	10-15% Chrysotile	Yes	Yes	1,500 S. F.
3-4-B45	4	Acoustical Plaster	Bsemnt, ceiling at freight elev. and loading dock	10-15% Chrysotile	Yes	Yes	1,500 S. F.
3-4-B16	5	White Text. Ceiling Plast. Over Coat	Ground floor, lobby, ceiling of freight elev.	10-15% Chrysotile	Yes	Yes	1,300 S. F.
3-4-B17	5	White Text. Ceiling Plast. Over Coat	Ground floor, lobby, ceiling of freight elev.	10-15% Chrysotile	Yes	Yes	1,300 S. F.
3-4-B18	5	White Text. Ceiling Plast. Over Coat	Ground floor, lobby, ceiling of freight elev.	10-15% Chrysotile	Yes	Yes	1,300 S. F.
3-4-B19	5	Brn. Text. Ceiling Plast. Under Coat	Ground floor, lobby, ceiling of freight elev.	Non-Detect	No	Yes	1,300 S. F.
3-4-B20	5	Brn. Text. Ceiling Plast. Under Coat	Ground floor, lobby, ceiling of freight elev.	Non-Detect	No	Yes	1,300 S. F.
3-4-B21	5	Brn. Text. Ceiling Plast. Under Coat	Ground floor, lobby, ceiling of freight elev.	Non-Detect	No	Yes	1,300 S. F.
3-7-B16	6	Ceiling Plaster	4th floor, elevator lobby	25-30% Chrysotile	Yes	Yes	600 S. F.
3-7-B17	6	Ceiling Plaster	4th floor, elevator lobby	40-45% Chry. & 40-45% Amo.	Yes	Yes	600 S. F.
3-7-B18	6	Ceiling Plaster	4th floor, elevator lobby	40-45% Chrysotile	Yes	Yes	600 S. F.
3-3-B52	7	Pipe Insulation	Sub-Basement, mech. Rm. SB214	1-5% Amosite	Yes	Yes	1,000 L. F.
3-3-B53	7	Pipe Insulation	Sub-Basement, mech. Rm. SB214	3-5% Amosite	Yes	Yes	1,000 L. F.
3-3-B54	7	Pipe Insulation	Sub-Basement, mech. Rm. SB214	<1% Amosite	No	Yes	1,000 L. F.
3-3-B55	7	Elbow Mud	Sub-Basement, mech. Rm. SB214	Non-Detect	No	Yes	1,000 L. F.
3-3-B56	7	Elbow Mud	Sub-Basement, mech. Rm. SB214	Non-Detect	No	Yes	1,000 L. F.
3-3-B57	7	Elbow Mud	Sub-Basement, mech. Rm. SB214	Non-Detect	No	Yes	1,000 L. F.
3-3-B58	7	Mud on Tank Valve P4-11	Sub-Basement, mech. Rm. SB214	Non-Detect	No	Yes	1,000 L. F.

3-3-B59	7	Mud on Tank Valve P4-11	Sub-Basement, mech. Rm. SB214	Non-Detect	No	Yes	1,000 L. F.
3-3-B60	7	Mud on Tank Valve P4-11	Sub-Basement, mech. Rm. SB214	Non-Detect	No	Yes	1,000 L. F.
3-4-B16	8	Old Suspended Ceiling Tile	Sub-Basement, mech. Rm. SB221-A	Non-Detect	No	Yes	8,000 S. F.
3-4-B17	8	Old Suspended Ceiling Tile	Sub-Basement, mech. Rm. SB221-A	Non-Detect	No	Yes	8,000 S. F.
<b>3-4-B18</b>	<b>8</b>	<b>Old Suspended Ceiling Tile</b>	<b>Sub-Basement, mech. Rm. SB221-A</b>	<b>1-3% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>8,000 S. F.</b>
3-4-B19	8	New Suspended Ceiling Tile	Sub-Basement, mech. Rm. SB221-A	Non-Detect	No	Yes	8,000 S. F.
3-4-B20	8	New Suspended Ceiling Tile	Sub-Basement, mech. Rm. SB221-A	Non-Detect	No	Yes	8,000 S. F.
3-4-B21	8	New Suspended Ceiling Tile	Sub-Basement, mech. Rm. SB221-A	Non-Detect	No	Yes	8,000 S. F.
3-4-B1	9	Elbow Mud from CW Pipe	Sub-Basement, parking garage	Non-Detect	No	Yes	32,000 L. F.
3-4-B2	9	Elbow Mud from CW Pipe	Sub-Basement, parking garage	Non-Detect	No	Yes	32,000 L. F.
<b>3-4-B3</b>	<b>9</b>	<b>Elbow Mud from CW Pipe</b>	<b>Sub-Basement, parking garage</b>	<b>1-3% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>32,000 L. F.</b>
3-3-B4	9	Elbow Mud	Sub-Basement, parking garage, rm. 2B2	Non-Detect	No	Yes	32,000 L. F.
3-3-B5	9	Elbow Mud	Sub-Basement, parking garage, rm. 2B2	Non-Detect	No	Yes	32,000 L. F.
3-3-B6	9	Elbow Mud	Sub-Basement, parking garage, rm. 2B2	Non-Detect	No	Yes	32,000 L. F.
3-3-B7	9	Pipe Insulation	Sub-Basement, parking garage, equip. cage	Non-Detect	No	Yes	32,000 L. F.
3-3-B8	9	Pipe Insulation	Sub-Basement, parking garage, equip. cage	Non-Detect	No	Yes	32,000 L. F.
3-3-B9	9	Pipe Insulation	Sub-Basement, parking garage, equip. cage	Non-Detect	No	Yes	32,000 L. F.
3-3-B61	10	Pipe Insulation	Sub-Basement, compressor rm.	Non-Detect	No	Yes	1,500 L. F.
3-3-B63	10	Pipe Insulation	Sub-Basement, compressor rm.	Non-Detect	No	Yes	1,500 L. F.
3-3-B64	10	Pipe Insulation	Sub-Basement, compressor rm.	Non-Detect	No	Yes	1,500 L. F.
3-3-B65	10	Pipe Insulation	Sub-Basement, compressor rm.	Non-Detect	No	Yes	1,500 L. F.
3-3-B66	10	Pipe Insulation	Sub-Basement, compressor rm.	<1% Amosite	No	Yes	1,500 L. F.
3-3-B67	10	Plaster Insulation	Sub-Basement, compressor rm., R5-2	Non-Detect	No	Yes	1,500 L. F.
3-3-B68	10	Plaster Insulation	Sub-Basement, compressor rm., R5-2	Non-Detect	No	Yes	1,500 L. F.
3-3-B69	10	Plaster Insulation	Sub-Basement, compressor rm., R5-2	Non-Detect	No	Yes	1,500 L. F.
3-3-B70	10	Elbow Mud on P-4-3	Sub-Basement, compressor rm.	Non-Detect	No	Yes	1,500 L. F.
3-3-B71	10	Elbow Mud on P-4-3	Sub-Basement, compressor rm.	Non-Detect	No	Yes	1,500 L. F.
3-3-B72	10	Elbow Mud on P-4-3	Sub-Basement, compressor rm.	Non-Detect	No	Yes	1,500 L. F.
3-4-B22	11	Pipe Insulation	Sub-Basement, exercise rm.	Non-Detect	No	Yes	375 L. F.
3-4-B23	11	Pipe Insulation	Sub-Basement, exercise rm.	Non-Detect	No	Yes	375 L. F.
3-4-B24	11	Pipe Insulation	Sub-Basement, exercise rm.	Non-Detect	No	Yes	375 L. F.
3-4-B25	11	Ceiling Tile	Sub-Basement, exercise rm.	Non-Detect	No	Yes	375 L. F.
3-4-B26	11	Ceiling Tile	Sub-Basement, exercise rm.	Non-Detect	No	Yes	375 L. F.
3-4-B27	11	Ceiling Tile	Sub-Basement, exercise rm.	Non-Detect	No	Yes	375 L. F.
<b>3-4-B46</b>	<b>13</b>	<b>Spray-on Fireproofing</b>	<b>Basement, west wing, transformer vault B112</b>	<b>20-25% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>30,000 S. F.</b>
<b>3-4-B47</b>	<b>13</b>	<b>Spray-on Fireproofing</b>	<b>Basement, west wing, transformer vault B112</b>	<b>30-35% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>30,000 S. F.</b>
<b>3-4-B48</b>	<b>13</b>	<b>Spray-on Fireproofing</b>	<b>Basement, west wing, transformer vault B112</b>	<b>30-35% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>30,000 S. F.</b>



3-4-B49	13	Spray-on Fireproofing	Basement, west wing, pipe access door	30-35% Chrysotile	Yes	Yes	30,000 S. F.
3-4-B50	13	Spray-on Fireproofing	Basement, west wing, pipe access door	30-35% Chrysotile	Yes	Yes	30,000 S. F.
3-4-B51	13	Spray-on Fireproofing	Basement, west wing, pipe access door	30-35% Chrysotile	Yes	Yes	30,000 S. F.
3-4-B31	14	Spray-on Fireproofing	Basement garage, on ceiling	35-40% Chrysotile	Yes	Yes	32,000 S. F.
3-4-B32	14	Spray-on Fireproofing	Basement garage, on ceiling	30-35% Chrysotile	Yes	Yes	32,000 S. F.
3-4-B33	14	Spray-on Fireproofing	Basement garage, on ceiling	20-25% Chrysotile	Yes	Yes	32,000 S. F.
3-4-B34	14	Elbow Mud on Sewer Line	Basement garage, back wall	Non-Detect	No	Yes	32,000 S. F.
3-4-B35	14	Elbow Mud on Sewer Line	Basement garage, back wall	Non-Detect	No	Yes	32,000 S. F.
3-4-B36	14	Elbow Mud on Sewer Line	Basement garage, back wall	Non-Detect	No	Yes	32,000 S. F.
3-4-B37	14	Overhead CW Valve	Basement garage, near air intake vents	1-3% Amosite	Yes	Yes	32,000 S. F.
3-4-B38	14	Overhead CW Valve	Basement garage, near air intake vents	1-3% Amosite	Yes	Yes	32,000 S. F.
3-4-B39	14	Overhead CW Valve	Basement garage, near air intake vents	25-30% Chrysotile	Yes	Yes	32,000 S. F.
3-6-B22	15	Spray-on Fireproofing	Ground floor, mech. rm. G117	30-35% Chrysotile	Yes	Yes	200 S. F.
3-6-B23	15	Spray-on Fireproofing	Ground floor, mech. rm. G117	30-35% Chrysotile	Yes	Yes	200 S. F.
3-6-B24	15	Spray-on Fireproofing	Ground floor, mech. rm. G117	35-40% Chrysotile	Yes	Yes	200 S. F.
3-6-B25	15	Elbow Mud on AHU A-11-13	Ground floor, mech. rm. G117	Non-Detect	No	Yes	200 S. F.
3-6-B26	15	Elbow Mud on AHU A-11-13	Ground floor, mech. rm. G117	Non-Detect	No	Yes	200 S. F.
3-6-B27	15	Elbow Mud on AHU A-11-13	Ground floor, mech. rm. G117	Non-Detect	No	Yes	200 S. F.
3-6-B28	15	Large Square Duct Insulation	Ground floor, mech. rm. G117	1-3% Chrysotile	Yes	Yes	200 S. F.
3-6-B29	15	Large Square Duct Insulation	Ground floor, mech. rm. G117	1-3% Chrysotile	Yes	Yes	200 S. F.
3-6-B30	15	Large Square Duct Insulation	Ground floor, mech. rm. G117	25-30% Chrysotile	Yes	Yes	200 S. F.
3-6-B31	15	Round Duct Insulation	Ground floor, mech. rm. G117	Non-Detect	No	Yes	200 S. F.
3-6-B32	15	Round Duct Insulation	Ground floor, mech. rm. G117	20-25% Chrysotile	Yes	Yes	200 S. F.
3-6-B33	15	Round Duct Insulation	Ground floor, mech. rm. G117	20-25% Chrysotile	Yes	Yes	200 S. F.
3-6-B34	15	Small Square Duct Insulation	Ground floor, mech. rm. G117	20-25% Chrysotile	Yes	Yes	200 S. F.
3-6-B35	15	Small Square Duct Insulation	Ground floor, mech. rm. G117	20-25% Chrysotile	Yes	Yes	200 S. F.
3-6-B36	15	Small Square Duct Insulation	Ground floor, mech. rm. G117	1-5% Chrysotile	Yes	Yes	200 S. F.
3-6-B1	16	Spray-on Fireproofing	Ground floor, mech. Rm. G211	20-25% Chrysotile	Yes	Yes	250 S. F.
3-6-B2	16	Spray-on Fireproofing	Ground floor, mech. Rm. G211	25-30% Chrysotile	Yes	Yes	250 S. F.
3-6-B3	16	Spray-on Fireproofing	Ground floor, mech. Rm. G211	25-30% Chrysotile	Yes	Yes	250 S. F.
3-6-B7	17	Spray-on Fireproofing	Ground floor, mech. rm. G236, lounge	Non-Detect	No	Yes	275 S. F.
3-6-B8	17	Spray-on Fireproofing	Ground floor, mech. rm. G236, lounge	Non-Detect	No	Yes	275 S. F.
3-6-B9	17	Spray-on Fireproofing	Ground floor, mech. rm. G236, lounge	Non-Detect	No	Yes	275 S. F.
3-6-B10	17	Suspended Ceiling Tiles	Ground floor, mech. rm. G236, lounge	Non-Detect	No	Yes	275 S. F.
3-6-B11	17	Suspended Ceiling Tiles	Ground floor, mech. rm. G236, lounge	Non-Detect	No	Yes	275 S. F.
3-6-B12	17	Suspended Ceiling Tiles	Ground floor, mech. rm. G236, lounge	Non-Detect	No	Yes	275 S. F.
3-6-B13	18	Pipe Insulation	Ground floor, rm. G201 & shaft in back	Non-Detect	No	Yes	1,500 L. F.

3-6-B14	18	Pipe Insulation	Ground floor, rm. G201 & shaft in back	Non-Detect	No	Yes	1,500 L. F.
3-6-B15	18	Pipe Insulation	Ground floor, rm. G201 & shaft in back	Non-Detect	No	Yes	1,500 L. F.
3-6-B4	19	Insulation Mat	Ground floor, rm. G236, above ceiling	Non-Detect	No	Yes	10 S. F.
3-6-B5	19	Insulation Mat	Ground floor, rm. G236, above ceiling	Non-Detect	No	Yes	10 S. F.
3-6-B6	19	Insulation Mat	Ground floor, rm. G236, above ceiling	Non-Detect	No	Yes	10 S. F.
3-7-B35	20	Suspended Ceiling Tiles	2nd floor, cafeteria kitchen	Non-Detect	No	Yes	800 S. F.
3-7-B36	20	Suspended Ceiling Tiles	2nd floor, cafeteria kitchen	Non-Detect	No	Yes	800 S. F.
3-7-B1	21	Acoustical Wall Tile	3rd floor, rm. 3113, copier room	Non-Detect	No	Yes	150 S. F.
3-7-B2	21	Acoustical Wall Tile	3rd floor, rm. 3113, copier room	Non-Detect	No	Yes	150 S. F.
3-7-B3	21	Acoustical Wall Tile	3rd floor, rm. 3113, copier room	Non-Detect	No	Yes	150 S. F.
<b>3-7-B4</b>	<b>21</b>	<b>Spray-on Fireproofing</b>	<b>3rd floor, rm. 3113, copier room</b>	<b>20-25% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>150 S. F.</b>
<b>3-7-B5</b>	<b>21</b>	<b>Spray-on Fireproofing</b>	<b>3rd floor, rm. 3113, copier room</b>	<b>30-35% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>150 S. F.</b>
<b>3-7-B6</b>	<b>21</b>	<b>Spray-on Fireproofing</b>	<b>3rd floor, rm. 3113, copier room</b>	<b>30-35% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>150 S. F.</b>
3-7-B7	21	Suspended Ceiling Tiles	3rd floor, rm. 3113, copier room	Non-Detect	No	Yes	150 S. F.
3-7-B8	21	Suspended Ceiling Tiles	3rd floor, rm. 3113, copier room	Non-Detect	No	Yes	150 S. F.
3-7-B9	21	Suspended Ceiling Tiles	3rd floor, rm. 3113, copier room	Non-Detect	No	Yes	150 S. F.
<b>3-7-B10</b>	<b>22</b>	<b>Spray-on Fireproofing</b>	<b>3rd floor, mech. room 3004</b>	<b>20-25% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>150 S. F.</b>
<b>3-7-B11</b>	<b>22</b>	<b>Spray-on Fireproofing</b>	<b>3rd floor, mech. room 3004</b>	<b>25-30% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>150 S. F.</b>
<b>3-7-B12</b>	<b>22</b>	<b>Spray-on Fireproofing</b>	<b>3rd floor, mech. room 3004</b>	<b>25-30% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>150 S. F.</b>
<b>3-7-B13</b>	<b>23</b>	<b>Spray-on Fireproofing</b>	<b>4th floor, mech. room 4004</b>	<b>30-35% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>150 S. F.</b>
<b>3-7-B14</b>	<b>23</b>	<b>Spray-on Fireproofing</b>	<b>4th floor, mech. room 4004</b>	<b>35-40% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>150 S. F.</b>
<b>3-7-B15</b>	<b>23</b>	<b>Spray-on Fireproofing</b>	<b>4th floor, mech. room 4004</b>	<b>30-35% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>150 S. F.</b>
<b>3-7-B19</b>	<b>24</b>	<b>Spray-on Fireproofing</b>	<b>5th floor, mech. room 5209</b>	<b>30-35% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>150 S. F.</b>
<b>3-7-B22</b>	<b>25</b>	<b>Spray-on Fireproofing</b>	<b>7th floor, rm. 7205</b>	<b>35-40% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>150 S. F.</b>
<b>3-7-B23</b>	<b>25</b>	<b>Spray-on Fireproofing</b>	<b>7th floor, rm. 7205</b>	<b>25-30% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>150 S. F.</b>
<b>3-7-B24</b>	<b>25</b>	<b>Spray-on Fireproofing</b>	<b>7th floor, rm. 7205</b>	<b>15-20% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>150 S. F.</b>
<b>3-7-B25</b>	<b>26</b>	<b>Spray-on Fireproofing</b>	<b>9th floor, rm. 9205</b>	<b>20-25% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>150 S. F.</b>
<b>3-7-B26</b>	<b>26</b>	<b>Spray-on Fireproofing</b>	<b>9th floor, rm. 9205</b>	<b>20-25% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>150 S. F.</b>
<b>3-7-B27</b>	<b>26</b>	<b>Spray-on Fireproofing</b>	<b>9th floor, rm. 9205</b>	<b>30-35% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>150 S. F.</b>
3-7-B28	27	Suspended Ceiling Tiles	10th floor, rm. 10001C	Non-Detect	No	Yes	350 S. F.
3-7-B29	27	Suspended Ceiling Tiles	10th floor, rm. 10001C	Non-Detect	No	Yes	350 S. F.
3-7-B30	27	Suspended Ceiling Tiles	10th floor, rm. 10001C	Non-Detect	No	Yes	350 S. F.
<b>3-3-B31</b>	<b>28</b>	<b>Duct Insulation</b>	<b>Penthouse, east mech. rm. AHU A-1-3</b>	<b>50-55% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>5,500 L. F.</b>
<b>3-3-B32</b>	<b>28</b>	<b>Duct Insulation</b>	<b>Penthouse, east mech. rm. AHU A-1-3</b>	<b>60-65% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>5,500 L. F.</b>
<b>3-3-B33</b>	<b>28</b>	<b>Duct Insulation</b>	<b>Penthouse, east mech. rm. AHU A-1-3</b>	<b>40-45% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>5,500 L. F.</b>
3-3-B34	28	Acoustical Wall Tile	Penthouse, east mech. rm.	Non-Detect	No	Yes	5,500 L. F.
3-3-B35	28	Acoustical Wall Tile	Penthouse, east mech. rm.	Non-Detect	No	Yes	5,500 L. F.

3-3-B36	28	Acoustical Wall Tile	Penthouse, east mech. rm.	Non-Detect	No	Yes	5,500 L. F.
3-3-B37	28	Pipe Insulation	Penthouse, east mech. rm., air sep. tank	65-70% Chrysotile	Yes	Yes	5,500 L. F.
3-3-B38	28	Pipe Insulation	Penthouse, east mech. rm., air sep. tank	70-75% Chrysotile	Yes	Yes	5,500 L. F.
3-3-B39	28	Pipe Insulation	Penthouse, east mech. rm., air sep. tank	70-75% Chrysotile	Yes	Yes	5,500 L. F.
3-3-B40	28	Mudded Elbow	Penthouse, east mech. rm.	Non-Detect	No	Yes	5,500 L. F.
3-3-B41	28	Mudded Elbow	Penthouse, east mech. rm.	Non-Detect	No	Yes	5,500 L. F.
3-3-B42	28	Mudded Elbow	Penthouse, east mech. rm.	Non-Detect	No	Yes	5,500 L. F.
3-3-B43	28	Mudded Elbow	Penthouse, rm. F-29-3	Non-Detect	No	Yes	5,500 L. F.
3-3-B44	28	Mudded Elbow	Penthouse, rm. F-29-3	Non-Detect	No	Yes	5,500 L. F.
3-3-B45	28	Mudded Elbow	Penthouse, rm. F-29-3	Non-Detect	No	Yes	5,500 L. F.
3-3-B46	28	Mudded Elbow	Penthouse, rm. F-29-2	Non-Detect	No	Yes	5,500 L. F.
3-3-B47	28	Mudded Elbow	Penthouse, rm. F-29-2	Non-Detect	No	Yes	5,500 L. F.
3-3-B48	28	Mudded Elbow	Penthouse, rm. F-29-2	Non-Detect	No	Yes	5,500 L. F.
3-3-B49	28	Vertical Pipe Insulation	Penthouse, AHU A-11-2	Non-Detect	No	Yes	5,500 L. F.
3-3-B50	28	Vertical Pipe Insulation	Penthouse, AHU A-11-2	Non-Detect	No	Yes	5,500 L. F.
3-3-B51	28	Vertical Pipe Insulation	Penthouse, AHU A-11-2	Non-Detect	No	Yes	5,500 L. F.
3-3-B1	29	Duct Insulation	Penthouse, west mech. rm., return duct F-2	70-75% Chrysotile	Yes	Yes	4,500 L.F.
3-3-B2	29	Duct Insulation	Penthouse, west mech. rm., return duct F-2	65-70% Chrysotile	Yes	Yes	4,500 L.F.
3-3-B3	29	Duct Insulation	Penthouse, west mech. rm., return duct F-2	65-70% Chrysotile	Yes	Yes	4,500 L.F.
3-3-B4	29	Chill Water Pipe Insulation	Penthouse, west mech. rm.	Non-Detect	No	Yes	4,500 L.F.
3-3-B5	29	Chill Water Pipe Insulation	Penthouse, west mech. rm.	Non-Detect	No	Yes	4,500 L.F.
3-3-B6	29	Chill Water Pipe Insulation	Penthouse, west mech. rm.	Non-Detect	No	Yes	4,500 L.F.
3-3-B7	29	Acoustical Wall Tile	Penthouse, west mech. rm.	Non-Detect	No	Yes	4,500 L.F.
3-3-B8	29	Acoustical Wall Tile	Penthouse, west mech. rm.	Non-Detect	No	Yes	4,500 L.F.
3-3-B9	29	Acoustical Wall Tile	Penthouse, west mech. rm.	Non-Detect	No	Yes	4,500 L.F.
3-3-B10	29	Chill Water Pipe Insulation	Penthouse, west mech. rm.	Non-Detect	No	Yes	4,500 L.F.
3-3-B11	29	Chill Water Pipe Insulation	Penthouse, west mech. rm.	Non-Detect	No	Yes	4,500 L.F.
3-3-B12	29	Chill Water Pipe Insulation	Penthouse, west mech. rm.	Non-Detect	No	Yes	4,500 L.F.
3-3-B13	29	Elbow Mud on AHU A-11-1	Penthouse, west mech. rm.	Non-Detect	No	Yes	4,500 L.F.
3-3-B14	29	Elbow Mud on AHU A-11-1	Penthouse, west mech. rm.	Non-Detect	No	Yes	4,500 L.F.
3-3-B15	29	Elbow Mud on AHU A-11-1	Penthouse, west mech. rm.	Non-Detect	No	Yes	4,500 L.F.
3-3-B16	29	Elbow Mud on AHU A-11-4	Penthouse, west mech. rm.	Non-Detect	No	Yes	4,500 L.F.
3-3-B17	29	Elbow Mud on AHU A-11-4	Penthouse, west mech. rm.	Non-Detect	No	Yes	4,500 L.F.
3-3-B18	29	Elbow Mud on AHU A-11-4	Penthouse, west mech. rm.	Non-Detect	No	Yes	4,500 L.F.
3-3-B19	30	Elbow Mud	Penthouse mech. room #2	Non-Detect	No	Yes	650 L. F.
3-3-B20	30	Elbow Mud	Penthouse mech. room #2	Non-Detect	No	Yes	650 L. F.
3-3-B21	30	Elbow Mud	Penthouse mech. room #2	Non-Detect	No	Yes	650 L. F.

3-3-B22	30	Sound Trap (F-27-10) Insulation	Penthouse mech. room #2	45-50% Chrysotile	Yes	Yes	650 L. F.
3-3-B23	30	Sound Trap (F-27-10) Insulation	Penthouse mech. room #2	65-70% Chrysotile	Yes	Yes	650 L. F.
3-3-B24	30	Sound Trap (F-27-10) Insulation	Penthouse mech. room #2	65-70% Chrysotile	Yes	Yes	650 L. F.
3-3-B25	31	Duct Insulation	Penthouse fan room #3, Duct A-11-3	55-60% Chrysotile	Yes	Yes	400 S. F.
3-3-B26	31	Duct Insulation	Penthouse fan room #3, Duct A-11-3	65-70% Chrysotile	Yes	Yes	400 S. F.
3-3-B27	31	Duct Insulation	Penthouse fan room #3, Duct A-11-3	65-70% Chrysotile	Yes	Yes	400 S. F.
3-3-B28	32	Vertical Duct Insulation	Penthouse mech. room #4	65-70% Chrysotile	Yes	Yes	500 S. F.
3-3-B29	32	Vertical Duct Insulation	Penthouse mech. room #4	65-70% Chrysotile	Yes	Yes	500 S. F.
3-3-B30	32	Vertical Duct Insulation	Penthouse mech. room #4	65-70% Chrysotile	Yes	Yes	500 S. F.
-2							
6-23-B1		Smooth Ceiling Plaster	3rd floor, rm. 3021	Non-Detect	No	Yes	
6-23-B2		Brown Coat from Ceiling Plaster	3rd floor, rm. 3021	Non-Detect	No	Yes	
6-23-B3		Elbow Mud	3rd floor, rm. 3021	Non-Detect	No	Yes	
6-23-B4		Smooth Ceiling Plaster	3rd floor, rm. 3019	Non-Detect	No	Yes	
6-23-B5		Smooth Ceiling Plaster	3rd floor, rm. 3015	Non-Detect	No	Yes	
6-23-B6		Rough Plaster	Outside Library	20-25% Chrysotile	Yes	Yes	
6-23-B7		Rough Plaster	Outside room G112	25-30% Chrysotile	Yes	Yes	
6-23-B8		Rough Plaster	1st floor, outside library	15-20% Chrysotile	Yes	Yes	
-3							
01JL		Flex Connector	East penthouse	Non-Detect	No	Yes	
02JL		Mastic Inside Air Handler	East penthouse	10-15% Chrysotile	No	Yes	
03JL		Mudded Pipe Elbow	East penthouse, cold water supply pipe	Non-Detect	No	Yes	
04JL		Cloth Cover	East penthouse, FG pipe	Non-Detect	No	Yes	
05JL		Mudded Pipe Elbow	East penthouse, cold water supply pipe	Non-Detect	No	Yes	
06JL		Cloth Cover	East penthouse, cold water return pipe	Non-Detect	No	Yes	
07JL		Mudded Valve	East penthouse, cold water pipe	Non-Detect	No	Yes	
08JL		Cloth Cover	East penthouse, cold water return pipe	Non-Detect	No	Yes	
09JL		Flex Connector	East penthouse	Non-Detect	No	Yes	
10JL		Mastic Inside Air Handler	East penthouse	10-15% Chrysotile	No	Yes	
11JL		Mudded Pipe Elbow	East penthouse, cold water supply pipe	Non-Detect	No	Yes	
12JL		Cloth Cover	East penthouse, cold water return pipe	Non-Detect	No	Yes	
13JL		Flex Connector	East penthouse	Non-Detect	No	Yes	
14JL		Flex Connector	East penthouse	Non-Detect	No	Yes	
15JL		Outside AHU Insulation	East penthouse	65-70% Chrysotile	Yes	Yes	
16JL		Concrete Ceiling	East penthouse	Non-Detect	No	Yes	
17JL		Mastic Inside AHU	West Penthouse	25-30% Chrysotile	Yes	Yes	
18JL		Mastic Inside AHU	West Penthouse	25-30% Chrysotile	Yes	Yes	

19JL		Mudded Pipe Elbow	West penthouse, cold water supply pipe	Non-Detect	No	Yes	
<b>20JL</b>		Cloth Cover	West penthouse, cold water return pipe	Non-Detect	<b>No</b>	<b>Yes</b>	
21JL		Cloth Cover	West penthouse, cold water supply pipe	Non-Detect	No	Yes	
22JL		Debris on Floor	West Penthouse	Non-Detect	No	Yes	
23JL		Cloth Cover	West penthouse, cold water supply pipe	<1% Chrysotile	No	Yes	
24JL		Debris on Floor	West Penthouse	<1% Chry. & Amo.	No	Yes	
25JL		Cloth Cover	West penthouse, cold water supply pipe	Non-Detect	No	Yes	
26JL		Debris on Floor	West Penthouse	Non-Detect	No	Yes	
<b>-4</b>							
2-2-B1		Ceiling Plaster	8th floor, men's room	Non-Detect	No	Yes	
2-2-B2		Dust Above Ceiling	8th floor, men's room	Non-Detect	No	Yes	
2-2-B3		Ceiling Plaster	8th floor, hallway	Non-Detect	No	Yes	
2-2-B4		Ceiling Plaster	8th floor, hallway	Non-Detect	No	Yes	
2-2-B5		Ceiling Plaster	8th floor, hallway	Non-Detect	No	Yes	
2-2-B6		Ceiling Dust	8th floor, men's room	Non-Detect	No	Yes	
2-2-B7		Ceiling Plaster	8th floor, men's room	Non-Detect	No	Yes	
2-2-B8		Plaster	8th floor, men's room	Non-Detect	No	Yes	
<b>-5</b>							
2-24-B1		32" Supply Duct Insulation	Supply room, adjacent carpenter's shop	Non-Detect	No	Yes	
2-24-B2		32" Supply Duct Insulation	Supply room, adjacent carpenter's shop	Non-Detect	No	Yes	
2-24-B3		32" Supply Duct Insulation	Supply room, adjacent carpenter's shop	Non-Detect	No	Yes	
2-24-B4		4" Duct Return Insulation	Center of carpenter's shop	Non-Detect	No	Yes	
2-24-B5		4" Duct Return Insulation	Center of carpenter's shop	Non-Detect	No	Yes	
2-24-B6		4" Duct Return Insulation	Center of carpenter's shop	Non-Detect	No	Yes	
2-24-B7		30" Round Supply Duct Insulation	Carpenter's shop storeroom	Non-Detect	No	Yes	
2-24-B8		30" Round Supply Duct Insulation	Carpenter's shop storeroom	Non-Detect	No	Yes	
2-24-B9		30" Round Supply Duct Insulation	Carpenter's shop storeroom	Non-Detect	No	Yes	
<b>-6</b>							
1301		Built-up Roofing	Roof	Non-Detect	No	No	
1302		Built-up Roofing	Roof	Non-Detect	No	No	
1303		Built-up Roofing	Roof	Non-Detect	No	No	
<b>1304</b>		<b>Roof Flashing</b>	<b>Roof</b>	<b>1-5% Chrysotile</b>	<b>Yes</b>	<b>No</b>	
1305		Roof Flashing	Roof	Non-Detect	No	No	
1306		Roof Flashing	Roof	Non-Detect	No	No	
1307		Tar Around Open Vents	Roof	Non-Detect	No	No	
<b>1308</b>		<b>Tar Around Open Vents</b>	<b>Roof</b>	<b>20-25% Chrysotile</b>	<b>Yes</b>	<b>No</b>	
<b>1309</b>		<b>Tar Around Elevated Section</b>	<b>Roof</b>	<b>25-30% Chrysotile</b>	<b>Yes</b>	<b>No</b>	

1310		Tar Around Elevated Section	Roof	<1% Chrysotile	No	No	
1311		Tar Around Elevated Section	Roof	<1% Chrysotile	No	No	
1312		Modified Roofing (Patch)	Roof	<1% Chrysotile	No	No	
1313		Modified Roofing (Patch)	Roof	<1% Chrysotile	No	No	
<b>1314</b>		<b>Tar Around Stack</b>	<b>Roof</b>	<b>20-25% Chrysotile</b>	<b>Yes</b>	<b>No</b>	
-7							
601A		Grey Tar Sealant	Jackson place side, base of frame	Non-Detect	No	No	
602A		Grey Tar Sealant	Jackson place side, base of frame	Non-Detect	No	No	
<b>603A</b>		<b>Black Tar Sealant</b>	<b>Jackson place side, base of frame</b>	<b>15-20% Chrysotile</b>	<b>Yes</b>	<b>No</b>	
604A		Grey Sealant Strip	Outside screen panels	Non-Detect	No	No	
<b>605A</b>		<b>Black Tar Sealant</b>	<b>Jackson place side, base of frame</b>	<b>15-20% Chrysotile</b>	<b>Yes</b>	<b>No</b>	
606A		Grey Sealant Strip	Outside screen panels	Non-Detect	No	No	
<b>607A</b>		<b>Black Tar Sealant</b>	<b>Jackson place side, base of frame</b>	<b>1-5% Chrysotile</b>	<b>Yes</b>	<b>No</b>	
608A		Grey Sealant Strip	Outside screen panels	Non-Detect	No	No	
609A		3' X 5' Roof Squares	Jackson place side, southeast corner	Non-Detect	No	No	
610A		Grey Tar Sealant	Jackson place side, base of frame	Non-Detect	No	No	
611A		Grey Tar Sealant	17th street, base of frame	Non-Detect	No	No	
612A		Grey Tar Sealant	17th street, base of frame	Non-Detect	No	No	
613A		Grey Sealant Strip	Inside of screen panels	Non-Detect	No	No	
614A		Grey Sealant Strip	Inside of screen panels	Non-Detect	No	No	
615A		Grey Sealant Strip	Inside of screen panels	Non-Detect	No	No	
<b>616A</b>		<b>White Caulk</b>	<b>Middle section of roof, top of panel supports</b>	<b>10-15% Chrysotile</b>	<b>Yes</b>	<b>No</b>	
<b>617A</b>		<b>White Caulk</b>	<b>Middle section of roof, top of panel supports</b>	<b>1-5% Chrysotile</b>	<b>Yes</b>	<b>No</b>	
<b>618A</b>		<b>White Caulk</b>	<b>Middle section of roof, top of panel supports</b>	<b>5-10% Chrysotile</b>	<b>Yes</b>	<b>No</b>	
619A		Yellow Foam Insulation	Inside Panels	Non-Detect	No	Yes	
-8							
<b>1401</b>		<b>Grey Sprayed-on Fireproofing</b>	<b>9th floor, rm. 9004</b>	<b>10% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>50 S. F.</b>
<b>1402</b>		<b>Grey Sprayed-on Fireproofing</b>	<b>9th floor, rm. 9006</b>	<b>15% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>50 S. F.</b>
<b>1403</b>		<b>Grey Sprayed-on Fireproofing</b>	<b>9th floor, rm. 9024</b>	<b>20% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>50 S. F.</b>
<b>1404</b>		<b>Grey Sprayed-on Fireproofing</b>	<b>9th floor, rm. 9022</b>	<b>25% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>50 S. F.</b>
<b>1405</b>		<b>Grey Sprayed-on Fireproofing</b>	<b>9th floor, rm. 9205</b>	<b>15% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>50 S. F.</b>
1406		Pipe Fittings	9th floor, rm. 9219	Non-Detect	No	Yes	1 Each
1407		Pipe Fittings	9th floor, rm. 9219	Non-Detect	No	Yes	1 Each
1408		Pipe Fittings	9th floor, rm. 9219	Non-Detect	No	Yes	1 Each
<b>1409</b>		<b>Grey Sprayed-on Fireproofing</b>	<b>8th floor, rm. 8219</b>	<b>5% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>25 S. F.</b>
<b>1410</b>		<b>Grey Sprayed-on Fireproofing</b>	<b>8th floor, rm. 8229</b>	<b>10% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>50 S. F.</b>
<b>1411</b>		<b>Grey Sprayed-on Fireproofing</b>	<b>8th floor, rm. 8231</b>	<b>10% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	<b>50 S. F.</b>

1412		Grey Sprayed-on Fireproofing	8th floor, rm. 8022	10% Chrysotile	Yes	Yes	50 S. F.
1413		Grey Sprayed-on Fireproofing	7th floor, rm. 7004	15% Chrysotile	Yes	Yes	50 S. F.
1414		Grey Sprayed-on Fireproofing	7th floor, rm. 7006	10% Chrysotile	Yes	Yes	50 S. F.
1415		Grey Sprayed-on Fireproofing	7th floor, rm. 7209	15% Chrysotile	Yes	Yes	50 S. F.
1416		Grey Sprayed-on Fireproofing	7th floor, rm. 7229	5% Chrysotile	Yes	Yes	50 S. F.
1417		Grey Sprayed-on Fireproofing	6th floor, rm. 6229	30% Chrysotile	Yes	Yes	50 S. F.
1418		Grey Sprayed-on Fireproofing	6th floor, rm. 6209	15% Chrysotile	Yes	Yes	50 S. F.
1419		Grey Sprayed-on Fireproofing	6th floor, rm. 6024	10% Chrysotile	Yes	Yes	50 S. F.
1420		Grey Sprayed-on Fireproofing	6th floor, rm. 6006	20% Chrysotile	Yes	Yes	50 S. F.
1421		Grey Sprayed-on Fireproofing	5th floor, rm. 5004	15% Chrysotile	Yes	Yes	50 S. F.
1422		Grey Sprayed-on Fireproofing	5th floor, rm. 5022	25% Chrysotile	Yes	Yes	50 S. F.
1423		Grey Sprayed-on Fireproofing	5th floor, rm. 5229	20% Chrysotile	Yes	Yes	50 S. F.
1424		Grey Sprayed-on Fireproofing	4th floor, rm. 4229	25% Chrysotile	Yes	Yes	50 S. F.
1425		Grey Sprayed-on Fireproofing	4th floor, rm. 4231	20% Chrysotile	Yes	Yes	50 S. F.
1426		Grey Sprayed-on Fireproofing	4th floor, rm. 4209	20% Chrysotile	Yes	Yes	50 S. F.
1427		Grey Sprayed-on Fireproofing	4th floor, rm. 4205	15% Chrysotile	Yes	Yes	50 S. F.
1428		Grey Sprayed-on Fireproofing	4th floor, rm. 4024	20% Chrysotile	Yes	Yes	50 S. F.
1429		Grey Sprayed-on Fireproofing	3rd floor, rm. 3006	20% Chrysotile	Yes	Yes	50 S. F.
1430		Grey Sprayed-on Fireproofing	3rd floor, rm. 3022	25% Chrysotile	Yes	Yes	50 S. F.
1431		Grey Sprayed-on Fireproofing	3rd floor, rm. 3024	15% Chrysotile	Yes	Yes	50 S. F.
1432		Grey Sprayed-on Fireproofing	3rd floor, rm. 3209	15% Chrysotile	Yes	Yes	50 S. F.
1433		Grey Sprayed-on Fireproofing	3rd floor, rm. 3229	20% Chrysotile	Yes	Yes	50 S. F.
1434		Grey Sprayed-on Fireproofing	3rd floor, rm. 3231	35% Chrysotile	Yes	Yes	50 S. F.
1435		Grey Sprayed-on Fireproofing	2nd floor, rm. 2020	10% Chrysotile	Yes	Yes	50 S. F.
1436		Grey Sprayed-on Fireproofing	2nd floor, rm. 2006	20% Chrysotile	Yes	Yes	50 S. F.
1437		Grey Sprayed-on Fireproofing	2nd floor, rm. adjacent 2006	15% Chrysotile	Yes	Yes	50 S. F.
1438		Grey Sprayed-on Fireproofing	2nd floor, rm. 2113	15% Chrysotile	Yes	Yes	50 S. F.
1439		Grey Sprayed-on Fireproofing	Rm. G205	15% Chrysotile	Yes	Yes	50 S. F.
1440		Grey Sprayed-on Fireproofing	Rm. G209	30% Chrysotile	Yes	Yes	75 S. F.
1441		Grey Sprayed-on Fireproofing	Rm. G229	Non-Detect	No	Yes	50 S. F.
1442		Grey Sprayed-on Fireproofing	Rm. G231	25% Chrysotile	Yes	Yes	50 S. F.
1443		Grey Sprayed-on Fireproofing	Rm. G006	20% Chrysotile	Yes	Yes	75 S. F.
1444		Grey Sprayed-on Fireproofing	Rm. G004	15% Chrysotile	Yes	Yes	50 S. F.
1445		Floor Tile & Mastic	Rm. B206	20% Chrysotile	Yes	Yes	1,200 S. F.
1446		Mudded Pipe Fitting	Rm. B112	25% Chrysotile	Yes	Yes	1,500 S. F.
1447		Floor Tile	Rm. B226	20% Chrysotile	Yes	Yes	1,200 S. F.
1448		Floor Tile Mastic	Rm. B227	25% Chrysotile	Yes	Yes	1,200 S. F.

<b>-9</b>							
<b>32501</b>		<b>Brown Seam Sealant</b>	<b>On metal duct above loft</b>	<b>2% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	
<b>32502</b>		<b>Brown Seam Sealant</b>	<b>On metal duct above loft</b>	<b>2% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	
<b>32503</b>		<b>Brown Seam Sealant</b>	<b>On metal duct above loft</b>	<b>2% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	
32504		Ceiling Plaster	Above loft	Non-Detect	No	No	
32505		Ceiling Plaster	Above loft	Non-Detect	No	No	
32506		Ceiling Plaster	Above loft	Non-Detect	No	No	
32511		Gypsum Board	On floor to loft area	Non-Detect	No	No	
32512		Gypsum Board	On floor to loft area	Non-Detect	No	No	
32513		Gypsum Board	On floor to loft area	Non-Detect	No	No	
<b>-10</b>							
6314		White/Tan Plaster	Third floor, rm. 3221	Non-Detect	No	Yes	
<b>6315</b>		<b>Brown Mastic</b>	<b>Third floor, rm. 3221</b>	<b>2% Chrysotile</b>	<b>Yes</b>	<b>No</b>	
6316		Grey Floor Tile/Mastic	Third floor, rm. 3221	Non-Detect	No	No	
6317		Black Cove Base/ Mastic	Third floor, rm. 3221	Non-Detect	No	No	
6318		White/Tan Plaster	Third floor, rm. 3223	Non-Detect	No	Yes	
6319		White Covebase Mastic	Third floor, rm. 3223	Non-Detect	No	No	
6320		White Gypsum Board	Third floor, rm. 3223	Non-Detect	No	Yes	
6321		Tan Joint Compound	Third floor, rm. 3236	<1% Chrysotile	No	Yes	
<b>6322</b>		<b>White Pipe Mastic</b>	<b>Third floor, rm. 3234</b>	<b>2% Chrysotile</b>	<b>Yes</b>	<b>No</b>	
6323		Tan Fibrous Ceiling Tile	Third floor, rm. 3234	Non-Detect	No	Yes	
6324		Tan Fibrous Ceiling Tile	10th floor	Non-Detect	No	Yes	
6325		Tan Fibrous Ceiling Tile	10th floor	Non-Detect	No	Yes	
6326		Brown Fiberboard	3rd floor, rm. 3021	<1% Chrysotile	No	Yes	
<b>6327</b>		<b>White Mastic</b>	<b>3rd floor, rm. 3021</b>	<b>2% Chrysotile</b>	<b>Yes</b>	<b>No</b>	
<b>6328</b>		<b>Brown Mastic</b>	<b>3rd floor, rm. 3021</b>	<b>2% Chrysotile</b>	<b>Yes</b>	<b>No</b>	
<b>6329</b>		<b>White Sprayed-on Fireproofing</b>	<b>3rd floor, rm. 3001</b>	<b>40% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	
<b>6330</b>		<b>White Sprayed-on Fireproofing</b>	<b>3rd floor, rm. 3001</b>	<b>40% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	
<b>6331</b>		<b>White Sprayed-on Fireproofing</b>	<b>3rd floor, rm. 3001</b>	<b>40% Chrysotile</b>	<b>Yes</b>	<b>Yes</b>	
6332		Off-White Suspended Ceiling Tile	7th floor, rm. 7217	Non-Detect	No	Yes	
<b>6333</b>		Off-White Suspended Ceiling Tile	7th floor, rm. 7217	Non-Detect	No	Yes	
6334		Off-White Suspended Ceiling Tile	7th floor, rm. 7217	Non-Detect	No	Yes	

- (1) Samples Collected by Occupational Medical Center, Report Dated 1-16-86
- (2) Samples Collected by Occupational Medical Center, Report Dated 7-21-89
- (3) Samples Collected by Environmental Management Systems, Inc., Report Dated 3-21-91
- (4) Samples Collected by Occupational Medical Center, Report Dated 2-11-93



- (5) Samples Collected by Occupational Medical Center, Report Dated 3-2-93**
- (6) Samples Collected by AMA, Inc., Report Dated 7-29-93**
- (7) Samples Collected by AMA, Inc., Report Dated 10-20-94**
- (8) Samples Collected by AMA, Inc., Report Dated 9-23-95**
- (9) Samples Collected by AMA, Inc., Rport Dated 4-2-96**
- (10) Samples Collected by ATC Associates, Report Dated 4-27-99**

February 16, 2012

General Services Administration  
ROB, Room 2080  
7<sup>th</sup> and D Street, SW  
Washington, DC 20407  
Attn: Mr. Tim Sleeth

RE: New Executive Office Building  
Global Project Number: R0292  
Order No.: GS-P-11-11-DC-0092  
PDN Number: PJ1N02069  
Contract No.: GS1107YAD0040

Dear Mr. Sleeth:

From January 23 to February 3, 2012, Global Consulting, Inc. (Global) provided Industrial Hygiene Services at the New Executive Office Building. During this period, Global's Industrial Hygienist, Mr. Sam Hargadine and Mr. Ousman Jobe conducted fibers-in-air (FIA) sampling in a range of hallways, cafeteria spaces, occupied spaces and mechanical spaces.

### **Methodology**

Fibers-in-air samples were collected to fulfill requirements under GSA Fiber-in-Air protocols that are conducted on a semi-annual basis. As per the scope of work provided, air samples were collected using low volume pumps calibrated between 3.0 and 4.0 liters per minute. An air volume of at least 1200 liters was obtained for all samples. All samples collected were set up in normal breathing zones.

Samples were submitted to EMSL Analytical, Inc., of Beltsville, Maryland, and AMA Analytical Services, Inc., of Lanham, Maryland for analysis via Phase Contrast Microscopy, NIOSH method 7400. When a sample exceeded 0.01 fibers per cubic centimeter (f/cc), it was upgraded to Transmission Electron Microscopy (TEM) via the NIOSH 7402 Method for further positive identification of fibers.

The sample numbers and sample location was noted for each sample. The sample identification number has the Global Job Number followed by the date of collection and sample number. Table 1 contains this information and the sample results. If a sample exceeded 0.01 f/cc the TEM result is noted in the next column.

Table 1: Sample Summary, Semi-Annual Fibers-in-Air Survey, New Executive Office Bld.

Sample Identification Number	Sample Location	PCM Results* (f/cc)	TEM Results** (f/cc)
R0292-01-23-12-01	10 <sup>th</sup> Floor, Stairwell 1	< 0.01	N/A
R0292-01-23-12-02	10 <sup>th</sup> Floor, 10202	< 0.01	N/A
R0292-01-23-12-03	10 <sup>th</sup> Floor Drew Perraut's Office	< 0.01	N/A
R0292-01-23-12-04	10 <sup>th</sup> Floor Suite E	< 0.01	N/A
R0292-01-23-12-05	10 <sup>th</sup> Floor, Wend Liberante's Office	< 0.01	N/A
R0292-01-23-12-06	10 <sup>th</sup> Floor, Next to 10236C	< 0.01	N/A
R0292-01-23-12-07	10 <sup>th</sup> Floor, 10235F	< 0.01	N/A
R0292-01-23-12-08	10 <sup>th</sup> Floor, Copy Room By Elevator	< 0.01	N/A
R0292-01-23-12-09	10 <sup>th</sup> Floor, 10021	N/A – TEM	<0.01
R0292-01-23-12-10	10 <sup>th</sup> Floor, 10006	N/A – TEM	<0.01
R0292-01-23-12-11	10 <sup>th</sup> Floor, 10103	N/A – TEM	<0.01
R0292-01-23-12-12	9 <sup>th</sup> Floor, Jennifer Swartz's Office	N/A – TEM	<0.01
R0292-01-23-12-14	9 <sup>th</sup> Floor, 9013	N/A – TEM	<0.01
R0292-01-23-12-15	9 <sup>th</sup> Floor, 9025	N/A – TEM	<0.01
R0292-01-24-12-03	9 <sup>th</sup> Floor, 9203	< 0.01	N/A
R0292-01-24-12-04	9 <sup>th</sup> Floor, Conference Room	< 0.01	N/A
R0292-01-24-12-05	9 <sup>th</sup> Floor, 9015	< 0.01	N/A
R0292-01-24-12-06	9 <sup>th</sup> Floor, 9221	< 0.01	N/A
R0292-01-24-12-07	9 <sup>th</sup> Floor, 9225	< 0.01	N/A
R0292-01-24-12-08	9 <sup>th</sup> Floor, 9227	< 0.01	N/A
R0292-01-24-12-09	9 <sup>th</sup> Floor, 9233	< 0.01	N/A
R0292-01-24-12-10	9 <sup>th</sup> Floor, 9026	<0.01	N/A
R0292-01-24-12-11	9 <sup>th</sup> Floor, 9025	< 0.01	N/A
R0292-01-24-12-12	9 <sup>th</sup> Floor, 9017	< 0.01	N/A
R0292-01-24-12-13	9 <sup>th</sup> Floor, 9007	< 0.01	N/A
R0292-01-24-12-14	9 <sup>th</sup> Floor, 9002	< 0.01	N/A
R0292-01-24-12-15	9 <sup>th</sup> Floor, 9104	< 0.01	N/A
R0292-01-24-12-16	9 <sup>th</sup> Floor, 9020	< 0.01	N/A
R0292-01-24-12-17	9 <sup>th</sup> Floor, 9001	< 0.01	N/A
R0292-01-25-12-03	8 <sup>th</sup> Floor, 8208	< 0.01	N/A
R0292-01-25-12-04	8 <sup>th</sup> Floor, 8202	< 0.01	N/A
R0292-01-25-12-05	8 <sup>th</sup> Floor, 8222	< 0.01	N/A
R0292-01-25-12-06	8 <sup>th</sup> Floor, 8236	< 0.01	N/A
R0292-01-25-12-07	8 <sup>th</sup> Floor, 8235	< 0.01	N/A
R0292-01-25-12-08	8 <sup>th</sup> Floor, 8223	< 0.01	N/A
R0292-01-25-12-09	8 <sup>th</sup> Floor, 8201	< 0.01	N/A
R0292-01-25-12-10	8 <sup>th</sup> Floor, 8002	< 0.01	N/A
R0292-01-25-12-11	8 <sup>th</sup> Floor, 8026	< 0.01	N/A
R0292-01-25-12-12	8 <sup>th</sup> Floor, 8025	< 0.01	N/A
R0292-01-25-12-13	8 <sup>th</sup> Floor, 8001	< 0.01	N/A

Sample Identification Number	Sample Location	PCM Results* (f/cc)	TEM Results** (f/cc)
R0292-01-25-12-14	8 <sup>th</sup> Floor, 8009	< 0.01	N/A
R0292-01-25-12-15	8 <sup>th</sup> Floor, 8104	< 0.01	N/A
R0292-01-25-12-16	8 <sup>th</sup> Floor, 8113	< 0.01	N/A
R0292-01-25-12-17	8 <sup>th</sup> Floor, 8018	< 0.01	N/A
R0292-01-26-12-03	7 <sup>th</sup> Floor, 7203	< 0.01	N/A
R0292-01-26-12-04	7 <sup>th</sup> Floor, 7210	< 0.01	N/A
R0292-01-26-12-05	7 <sup>th</sup> Floor, 7222	< 0.01	N/A
R0292-01-26-12-06	7 <sup>th</sup> Floor, 7236	< 0.01	N/A
R0292-01-26-12-07	7 <sup>th</sup> Floor, 7225	< 0.01	N/A
R0292-01-26-12-08	7 <sup>th</sup> Floor, 7215	< 0.01	N/A
R0292-01-26-12-09	7 <sup>th</sup> Floor, 7201	< 0.01	N/A
R0292-01-26-12-10	7 <sup>th</sup> Floor, 7103	0.013^	N/A
R0292-01-26-12-11	7 <sup>th</sup> Floor, 7021	< 0.01	N/A
R0292-01-26-12-12	7 <sup>th</sup> Floor, 7027	< 0.01	N/A
R0292-01-26-12-13	7 <sup>th</sup> Floor, 7017	< 0.01	N/A
R0292-01-26-12-14	7 <sup>th</sup> Floor, 7009	< 0.01	N/A
R0292-01-26-12-15	7 <sup>th</sup> Floor, 7001	< 0.01	N/A
R0292-01-26-12-16	7 <sup>th</sup> Floor, 7002	< 0.01	N/A
R0292-01-26-12-17	7 <sup>th</sup> Floor, 7102	< 0.01	N/A
R0292-01-27-12-03	6 <sup>th</sup> Floor, 6202	< 0.01	N/A
R0292-01-27-12-04	6 <sup>th</sup> Floor, 6218	< 0.01	N/A
R0292-01-27-12-05	6 <sup>th</sup> Floor, 6226	< 0.01	N/A
R0292-01-27-12-06	6 <sup>th</sup> Floor, 6236	< 0.01	N/A
R0292-01-27-12-07	6 <sup>th</sup> Floor, 6235	< 0.01	N/A
R0292-01-27-12-08	6 <sup>th</sup> Floor, 6221	< 0.01	N/A
R0292-01-27-12-09	6 <sup>th</sup> Floor, 6216	< 0.01	N/A
R0292-01-27-12-10	6 <sup>th</sup> Floor, 6102	< 0.01	N/A
R0292-01-27-12-11	6 <sup>th</sup> Floor, 6013	< 0.01	N/A
R0292-01-27-12-12	6 <sup>th</sup> Floor, 6001	< 0.01	N/A
R0292-01-27-12-13	6 <sup>th</sup> Floor, 6025	< 0.01	N/A
R0292-01-27-12-14	6 <sup>th</sup> Floor, 6026	< 0.01	N/A
R0292-01-27-12-15	6 <sup>th</sup> Floor, 6011	< 0.01	N/A
R0292-01-27-12-16	6 <sup>th</sup> Floor, 6002	< 0.01	N/A
R0292-01-27-12-17	6 <sup>th</sup> Floor, 6008	< 0.01	N/A
R0292-01-30-12-03	5 <sup>th</sup> Floor, 5002	< 0.01	N/A
R0292-01-30-12-04	5 <sup>th</sup> Floor, 5008	< 0.01	N/A
R0292-01-30-12-05	4 <sup>th</sup> Floor, 4004	< 0.01	N/A
R0292-01-30-12-06	4 <sup>th</sup> Floor, 4002	< 0.01	N/A
R0292-01-30-12-07	4 <sup>th</sup> Floor, 4001	< 0.01	N/A
R0292-01-30-12-08	4 <sup>th</sup> Floor, 4003	< 0.01	N/A
R0292-01-30-12-09	4 <sup>th</sup> Floor, 4007	< 0.01	N/A

Sample Identification Number	Sample Location	PCM Results* (f/cc)	TEM Results** (f/cc)
R0292-01-30-12-10	5 <sup>th</sup> Floor, 5001	< 0.01	N/A
R0292-01-30-12-11	4 <sup>th</sup> Floor, 4013	< 0.01	N/A
R0292-01-30-12-12	4 <sup>th</sup> Floor, 4017	< 0.01	N/A
R0292-01-30-12-13	4 <sup>th</sup> Floor, 4025-A	< 0.01	N/A
R0292-01-30-12-14	4 <sup>th</sup> Floor, 4101	< 0.01	N/A
R0292-01-30-12-15	4 <sup>th</sup> Floor, 4026-A	< 0.01	N/A
R0292-01-30-12-16	4 <sup>th</sup> Floor, 4025-B	< 0.01	N/A
R0292-01-30-12-17	4 <sup>th</sup> Floor, 4026-B	< 0.01	N/A
R0292-01-31-12-04	B1 Main Vault B112	0.017^	<0.01
R0292-01-31-12-05	B1 Carpenter Shop	< 0.01	N/A
R0292-01-31-12-06	B1 B226	< 0.01	N/A
R0292-01-31-12-07	B1 B238	< 0.01	N/A
R0292-01-31-12-08	Elevator Shop	< 0.01	N/A
R0292-01-31-12-09	Elevator Office	< 0.01	N/A
R0292-01-31-12-10	2 <sup>nd</sup> Floor, 2020	< 0.01	N/A
R0292-01-31-12-11	2 <sup>nd</sup> Floor, 2020	< 0.01	N/A
R0292-01-31-12-12	2 <sup>nd</sup> Floor, Gym	< 0.01	N/A
R0292-01-31-12-13	2 <sup>nd</sup> Floor, Cafeteria	< 0.01	N/A
R0292-01-31-12-14	2 <sup>nd</sup> Floor, Cafeteria Kitchen	< 0.01	N/A
R0292-01-31-12-15	B1 B112	< 0.01	N/A
R0292-01-31-12-16	B1 B101	< 0.01	N/A
R0292-01-31-12-17	B1 Carpenter Shop	< 0.01	N/A
R0292-02-01-12-03	Pent House Locker E	0.01^	< 0.01
R0292-02-01-12-04	Pent House AHU 3	0.011^	< 0.01
R0292-02-01-12-05	Pent House B7.F.29.3 Door	< 0.01	N/A
R0292-02-01-12-06	Pent House Air Shaft F.272	< 0.01	N/A
R0292-02-01-12-07	Pent House Air Shaft F.276	0.013^	< 0.01
R0292-02-01-12-08	Pent House AHU 4	< 0.01	N/A
R0292-02-01-12-09	Pent House BX.173	< 0.01	N/A
R0292-02-01-12-10	Pent House AHU 11	< 0.01	N/A
R0292-02-01-12-11	Pent House F.27-1	< 0.01	N/A
R0292-02-01-12-12	B2 Tank Room	< 0.01	N/A
R0292-02-01-12-13	B2 Chiller 2	< 0.01	N/A
R0292-02-01-12-14	B2 Locker Room	< 0.01	N/A
R0292-02-01-12-15	B2 Supervisor Hallway	< 0.01	N/A
R0292-02-01-12-16	B2 Garage Water Treatment	< 0.01	N/A
R0292-02-01-12-17	B2 Garage Shop Storage	< 0.01	N/A

\* Phase Contrast Microscopy NIOSH 7400 Method, occupancy limit less than 0.01 f/cc

\*\* Transmission Electron Microscopy NIOSH 7402 Method of Analysis – occupancy limit less than 0.01 f/cc

^ Sample greater than or equal to 0.01 f/cc (occupancy limit)

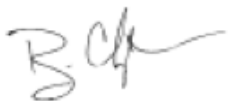
**Sample Results**

A total of 121 PCM samples were collected during this survey. All samples taken during this time period were within occupancy limits (by TEM) at less than 0.01 fibers per cubic centimeter ( $< 0.01 \text{ f/cc}$ ).

The laboratory analysis reports are attached following this letter.

Thank you for the opportunity to work with the General Services Administration. We look forward to working with you in the future. Please contact me at (202) 832-1433 should you have any questions regarding this report.

Sincerely,



Brian Chapman  
Global Consulting, Inc.



Tom Kallio, CIH  
Global Consulting, Inc.

# PCM Laboratory Results


**EMSL Analytical, Inc.**

10768 Baltimore Avenue, Beltsville, MD 20705

Phone: (301) 937-5700 Fax: (301) 937-5701 Email: beltsvillelab@emsl.com

Attn: **Samuel Hargadine**  
**Global Consulting, Inc.**  
**1818 New York Avenue N.E.**  
**Suite 111**  
**Washington, DC 20002**

Customer ID: GLOC62  
 Customer PO:  
 Received: 01/27/12 9:55 AM  
 EMSL Order: 191200786

Fax: (202) 832-1434 Phone: (202) 832-1433  
 Project: **R0292 NEOB**

EMSL Proj:  
 Analysis Date: 1/30/2012

**Test Report: Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method,  
 Revision 3, Issue 2, 8/15/94**

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/ mm <sup>2</sup>	Fibers/ cc	Notes
R0292/012312/01 191200786-0001	10TH FL STAIRWELL 1	1/23/2012	1207.50	13	100	0.002	16.6	0.005	
R0292/012312/02 191200786-0002	10TH FL 10202	1/23/2012	1207.50	<5.5	100	0.002	<7.01	<0.002	
R0292/012312/03 191200786-0003	10TH FL DREW PERRAUT'S OFFICE	1/23/2012	1207.50	22	100	0.002	28.0	0.009	
R0292/012312/04 191200786-0004	10TH FL SUITE E	1/23/2012	1207.50	<5.5	100	0.002	<7.01	<0.002	
R0292/012312/05 191200786-0005	10TH FL WENDY LIBERANTE'S OFFICE	1/23/2012	1207.50	9	100	0.002	11.5	0.004	
R0292/012312/06 191200786-0006	10TH FL NEXT TO 10236C	1/23/2012	1207.50	<5.5	100	0.002	<7.01	<0.002	
R0292/012312/07 191200786-0007	10TH FL 10235F	1/23/2012	1207.50	<5.5	100	0.002	<7.01	<0.002	
R0292/012312/08 191200786-0008	10TH FL COPY ROOM BY ELEVATOR	1/23/2012	1207.50	<5.5	100	0.002	<7.01	<0.002	
R0292/012312/09 191200786-0009	10TH FL 10021	1/23/2012		100	61		209		

Initial report from 01/30/2012 16:49:15

Analyst(s)

Elluz Chong Qui (14)

Joe Centifonti, Laboratory Manager  
 or other approved signatory

Limit of detection is 7 fibers/mm<sup>2</sup>. Intra-laboratory Sr values: 5-20 fibers = 0.33, 21-50 fibers = 0.26, 51-100 fibers = 0.16. Inter-laboratory Sr values (Average of EMSL round robin data) = 0.29. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. EMSL is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. Results have been blank corrected as applicable. Samples received in good condition unless otherwise noted.

Samples analyzed by EMSL Analytical, Inc. Beltsville, MD AIHA-LAP, LLC--IHAP Lab 102891

Test Report PCM-7.22.0 Printed: 1/30/2012 4:49:16 PM

1




**EMSL Analytical, Inc.**

10768 Baltimore Avenue, Beltsville, MD 20705

Phone: (301) 937-5700 Fax: (301) 937-5701 Email: beltsvillelab@emsl.com

Attn: **Samuel Hargadine**  
**Global Consulting, Inc.**  
**1818 New York Avenue N.E.**  
**Suite 111**  
**Washington, DC 20002**

Customer ID: GLOC62  
 Customer PO:  
 Received: 01/27/12 9:55 AM  
 EMSL Order: 191200786

Fax: (202) 832-1434 Phone: (202) 832-1433  
 Project: **R0292 NEOB**

EMSL Proj:  
 Analysis Date: 1/30/2012

**Test Report: Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method,  
 Revision 3, Issue 2, 8/15/94**

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/ mm <sup>2</sup>	Fibers/ cc	Notes
R0292/012312/10	10TH FL 10006	1/23/2012		69.5	100		88.5		
191200786-0010									
R0292/012312/11	10TH FL 10103	1/23/2012		88.5	100		113		
191200786-0011									
R0292/012312/12	9TH FL JENNIFER SWARTZ'S OFFICE	1/23/2012		78.5	100		100		
191200786-0012									
R0292/012312/14	9TH FL 9013	1/23/2012		100.5	93		138		
191200786-0013									
R0292/012312/15	9TH FL 9025	1/23/2012		100.5	64		200		
191200786-0014									

No discernable field blanks submitted with this sample set.

Initial report from 01/30/2012 16:49:15

Analyst(s)

Elluz Chong Qui (14)

Joe Centifonti, Laboratory Manager  
 or other approved signatory

Limit of detection is 7 fibers/mm<sup>2</sup>. Intra-laboratory Sr values: 5-20 fibers = 0.33, 21-50 fibers = 0.26, 51-100 fibers = 0.16. Inter-laboratory Sr. values (Average of EMSL round robin data) = 0.29. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. EMSL is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. Results have been blank corrected as applicable. Samples received in good condition unless otherwise noted.  
 Samples analyzed by EMSL Analytical, Inc. Beltsville, MD AIHA-LAP, LLC--IHLAP Lab 102891

Test Report PCM-7.22.0 Printed: 1/30/2012 4:49:16 PM

**THIS IS THE LAST PAGE OF THE REPORT.**

2



## CERTIFICATE OF ANALYSIS



**Client:** Global Consulting, Inc. **Job Name:** NEOB **Chain Of Custody:** 220700  
**Address:** 1818 New York Avenue, NE, Suite 111 **Job Location:** 9th Floor Office **Date Submitted:** 1/25/2012  
**Washington, DC 20002** **Job Number:** R0292 **Person Submitting:** J. Rodriguez  
**Attention:** Brian **P.O. Number:** Not Provided **Date Analyzed:** 1/30/2012 **Report Date:** 1/30/2012  
**Date Sampled:** 1/24/2012

### Summary of Phase Contrast Microscopy

Page 1 of 2

AMA Sample Number	Client Sample Number	Volume Sampled (Liters)	Fibers Per Millimeter Squared	Fibers Per Cubic Centimeter	Analyst I.D.	Sample Type	Comments
12030370	JR-01-24-03	1200	<7*	<0.005*	RP	N/P	
12030371	JR-01-24-04	1205	<7*	<0.005*	RP	N/P	
12030372	JR-01-24-05	1200	<7*	<0.005*	RP	N/P	
12030373	JR-01-24-06	1260	<7*	<0.005*	RP	N/P	
12030374	JR-01-24-07	1200	<7*	<0.005*	RP	N/P	
12030375	JR-01-24-08	1200	<7*	<0.005*	RP	N/P	
12030376	JR-01-24-09	1200	<7*	<0.005*	RP	N/P	
12030377	JR-01-24-10	1200	<7*	<0.005*	RP	N/P	
12030378	JR-01-24-11	1200	<7*	<0.005*	RP	N/P	
12030379	JR-01-24-12	1200	<7*	<0.005*	RP	N/P	
12030380	JR-01-24-13	1200	<7*	<0.005*	RP	N/P	
12030381	JR-01-24-14	1200	<7*	<0.005*	RP	N/P	
12030382	JR-01-24-15	1200	<7*	<0.005*	RP	N/P	
12030383	JR-01-24-16	1200	7.6	<0.005*	RP	N/P	
12030384	JR-01-24-17	1200	<7*	<0.005*	RP	N/P	

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these Laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from us. Sample types, locations, and collection protocols are based upon the information provided by the persons submitting them and, unless collected by personnel of these Laboratories, we expressly disclaim any knowledge and liability for the accuracy and completeness of this information. Residual sample material will be discarded in accordance with the appropriate regulatory guidelines, unless otherwise requested by the client. NVLAP accreditation applies only to polarized light microscopy of bulk samples and transmission electron microscopy of AHERA air samples. This report must not be used to chain, and does not imply product certification, approval, or endorsement by NY ELAP, NVLAP, NIST, or any agency of the Federal Government. All rights reserved. AMA Analytical Services, Inc.

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**CERTIFICATE OF ANALYSIS**



<b>Client:</b>	Global Consulting, Inc.	<b>Job Name:</b>	NEOB	<b>Chain Of Custody:</b>	220702
<b>Address:</b>	1818 New York Avenue, NE, Suite 111 Washington, DC 20002	<b>Job Location:</b>	8th Floor Office	<b>Date Submitted:</b>	1/26/2012
<b>Attention:</b>	Brian Chapman	<b>Job Number:</b>	R0292	<b>Person Submitting:</b>	J. Rodriguez
		<b>P.O. Number:</b>	Not Provided	<b>Date Analyzed:</b>	1/31/2012
				<b>Date Sampled:</b>	1/25/2012

**Summary of Phase Contrast Microscopy**

Page 1 of 2

AMA Sample Number	Client Sample Number	Volume Sampled (Liters)	Filters Per Millimeter Squared	Filters Per Cubic Centimeter	Analyst I.D.	Sample Type	Comments
12030660	JR-01-25-03	1200	<7*	<0.005*	RP	NIP	
12030661	JR-01-25-04	1200	<7*	<0.005*	RP	NIP	
12030662	JR-01-25-05	1200	<7*	<0.005*	RP	NIP	
12030663	JR-01-25-06	1200	8.3	<0.005*	RP	NIP	
12030664	JR-01-25-07	1200	<7*	<0.005*	RP	NIP	
12030665	JR-01-25-08	1200	8.9	<0.005*	RP	NIP	
12030666	JR-01-25-09	1200	10.2	<0.005*	RP	NIP	
12030667	JR-01-25-10	1200	10.2	<0.005*	RP	NIP	
12030668	JR-01-25-11	1200	<7*	<0.005*	RP	NIP	
12030669	JR-01-25-12	1200	<7*	<0.005*	RP	NIP	
12030670	JR-01-25-13	1200	9.6	<0.005*	RP	NIP	
12030671	JR-01-25-14	1200	<7*	<0.005*	RP	NIP	
12030672	JR-01-25-15	1200	9.6	<0.005*	RP	NIP	
12030673	JR-01-25-16	1200	<7*	<0.005*	RP	NIP	
12030674	JR-01-25-17	1200	<7*	<0.005*	RP	NIP	

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these Laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from us. Sample types, locations, and collection protocols are based upon the information provided by the persons submitting them and, unless collected by personnel of these Laboratories, we expressly disclaim any knowledge and liability for the accuracy and completeness of this information. Residual sample material will be discarded in accordance with the appropriate regulatory guidelines, unless otherwise requested by the client. NYLAP accreditation applies only to polarized light microscopy of bulk samples and transmission electron microscopy of AMBIENT air samples. This report must not be used to claim, and does not imply product certification, approval, or endorsement by NY ELAP, NYLAP, NIST, or any agency of the Federal Government. All rights reserved. AMA Analytical Services, Inc.

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**CERTIFICATE OF ANALYSIS**

Client: Global Consulting, Inc. Job Name: NIOB Chain Of Custody: 220972  
Address: 1818 New York Avenue, NE, Suite 111 Job Location: 7th Floor Office Date Submitted: 12/27/2012  
Washington, DC 20002 Job Number: R0292 Person Submitting: J. Rodriguez  
P.O. Number: Not Provided Date Analyzed: 2/1/2012 Report Date: 2/1/2012  
Attention: Brian Chapman Date Sampled: 12/26/2012

**Summary of Phase Contrast Microscopy**

Page 1 of 2

AMA Sample Number	Client Sample Number	Volume Sampled (Liters)	Fibers Per Millimeter Squared	Fibers Per Cubic Centimeter	Sample Type	Comments
12031624	JR-01-26-03	1200	<7*	<0.005*	GEC	N/P
12031625	JR-01-26-04	1200	12.7	<0.005*	GEC	N/P
12031626	JR-01-26-05	1200	<7*	<0.005*	GEC	N/P
12031627	JR-01-26-06	1200	<7*	<0.005*	GEC	N/P
12031628	JR-01-26-07	1200	12.7	<0.005*	GEC	N/P
12031629	JR-01-26-08	1200	10.8	<0.005*	GEC	N/P
12031630	JR-01-26-09	1200	14.0	<0.005*	GEC	N/P
12031631	JR-01-26-10	1200	41.4	0.013	GEC	N/P
12031632	JR-01-26-11	1200	14.0	<0.005*	GEC	N/P
12031633	JR-01-26-12	1200	<7*	<0.005*	GEC	N/P
12031634	JR-01-26-13	1200	<7*	<0.005*	GEC	N/P
12031635	JR-01-26-14	1200	<7*	<0.005*	GEC	N/P
12031636	JR-01-26-15	1200	14.0	<0.005*	GEC	N/P
12031637	JR-01-26-16	1200	29.3	0.009	GEC	N/P
12031638	JR-01-26-17	1200	17.2	0.006	GEC	N/P

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# CERTIFICATE OF ANALYSIS

**Client:** Global Consulting, Inc. **Job Name:** NEOB **Chain Of Custody:** 220974  
**Address:** 1818 New York Avenue, NE, Suite 111 **Job Location:** 6th Floor Office **Date Submitted:** 1/30/2012  
**Job Number:** R0292 **Person Submitting:** J. Rodriguez  
**P.O. Number:** Not Provided **Date Analyzed:** 2/1/2012  
**Report Date:** 2/1/2012  
**Attention:** Brian Chapman **Date Sampled:** 1/27/2012

## Summary of Phase Contrast Microscopy

Page 1 of 2

AMA Sample Number	Client Sample Number	Volume Sampled (Liters)	Fibers Per Millimeter Squared	Fibers Per Cubic Centimeter	Analyst I.D.	Sample Type	Comments
12031639	JR-01-27-03	1200	<7*	<0.005*	RP	N/P	
12031640	JR-01-27-04	1200	<7*	<0.005*	RP	N/P	
12031641	JR-01-27-05	1200	<7*	<0.005*	RP	N/P	
12031642	JR-01-27-06	1200	<7*	<0.005*	RP	N/P	
12031643	JR-01-27-07	1200	<7*	<0.005*	RP	N/P	
12031644	JR-01-27-08	1200	8.9	<0.005*	RP	N/P	
12031645	JR-01-27-09	1200	21.7	0.007	RP	N/P	
12031646	JR-01-27-10	1200	29.3	0.009	RP	N/P	
12031647	JR-01-27-11	1200	29.3	0.009	RP	N/P	
12031648	JR-01-27-12	600	<7*	<0.005*	RP	N/P	
12031649	JR-01-27-13	1200	<7*	<0.005*	RP	N/P	
12031650	JR-01-27-14	1200	17.2	0.006	RP	N/P	
12031651	JR-01-27-15	1200	23.6	0.008	RP	N/P	
12031652	JR-01-27-16	600	<7*	<0.005*	RP	N/P	
12031653	JR-01-27-17	1200	28.0	0.009	RP	N/P	

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these Laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from us. Sample types, locations, and collection protocols are based upon the information provided by the persons submitting them and, unless collected by personnel of these Laboratories, we expressly disclaim any knowledge and liability for the accuracy and completeness of this information. Residual sample material will be discarded in accordance with the appropriate regulatory guidelines, unless otherwise requested by the client. NYLAP accreditation applies only to polarized light microscopy of bulk samples and transmission electron microscopy of airborne particulates. This report must not be used to claim, and does not imply product certification, approval, or endorsement by NY ELAP, NY LAC, NIOSH, or any agency of the Federal Government. All rights reserved. AMA Analytical Services, Inc.

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**EMSL Analytical, Inc.**

10768 Baltimore Avenue, Beltsville, MD 20705

Phone: (301) 937-5700 Fax: (301) 937-5701 Email: beltsvillelab@emsl.com

Attn: **Brian Chapman**  
**Global Consulting, Inc.**  
**1818 New York Avenue N.E.**  
**Suite 111**  
**Washington, DC 20002**

Customer ID: GLOC62  
 Customer PO:  
 Received: 01/31/12 1:00 PM  
 EMSL Order: 191200916

Fax: (202) 832-1434 Phone: (202) 832-1433  
 Project: **NEOB - R0292**

EMSL Proj:  
 Analysis Date: 2/2/2012

**Test Report: Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method,  
 Revision 3, Issue 2, 8/15/94**

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/ mm <sup>2</sup>	Fibers/ cc	Notes
JR-01-30-03 191200916-0001	5TH FL OFFICE RM 5002	1/30/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-30-04 191200916-0002	5TH FL OFFICE RM 5008	1/30/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-30-05 191200916-0003	4TH FL OFFICE RM 4004	1/30/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-30-06 191200916-0004	4TH FL OFFICE RM 4002	1/30/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-30-07 191200916-0005	4TH FL OFFICE RM 4001	1/30/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-30-08 191200916-0006	4TH FL OFFICE RM 4003	1/30/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-30-09 191200916-0007	4TH FL OFFICE RM 4007	1/30/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-30-10 191200916-0008	5TH FL OFFICE RM 5001	1/30/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-30-11 191200916-0009	4TH FL OFFICE RM 4013	1/30/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-30-12 191200916-0010	4TH FL OFFICE RM 4017	1/30/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	

Initial report from 02/02/2012 17:11:09

Analyst(s)

Elluz Chong Qui (15)

Joe Centifonti, Laboratory Manager  
 or other approved signatory

Limit of detection is 7 fibers/mm<sup>2</sup>. Intra-laboratory Sr values: 5-20 fibers = 0.33, 21-50 fibers = 0.26, 51-100 fibers = 0.16. Inter-laboratory Sr. values (Average of EMSL round robin data) = 0.29. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. EMSL is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. Results have been blank corrected as applicable. Samples received in good condition unless otherwise noted.  
 Samples analyzed by EMSL Analytical, Inc. Beltsville, MD AIHA-LAP, LLC--IHAP Lab 102891

Test Report PCM-7.22.0 Printed: 2/2/2012 5:11:10 PM

1


**EMSL Analytical, Inc.**

10768 Baltimore Avenue, Beltsville, MD 20705

Phone: (301) 937-5700 Fax: (301) 937-5701 Email: beltsvillelab@emsl.com

Attn: **Brian Chapman**  
**Global Consulting, Inc.**  
**1818 New York Avenue N.E.**  
**Suite 111**  
**Washington, DC 20002**

Customer ID: GLOC62  
 Customer PO:  
 Received: 01/31/12 1:00 PM  
 EMSL Order: 191200916

Fax: (202) 832-1434 Phone: (202) 832-1433  
 Project: **NEOB - R0292**

EMSL Proj:  
 Analysis Date: 2/2/2012

**Test Report: Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method,  
 Revision 3, Issue 2, 8/15/94**

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/ mm <sup>2</sup>	Fibers/ cc	Notes
JR-01-30-13 191200916-0011	4TH FL OFFICE RM 4025-A	1/30/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-30-14 191200916-0012	4TH FL OFFICE RM 4101	1/30/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-30-15 191200916-0013	4TH FL OFFICE RM 4026-A	1/30/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-30-16 191200916-0014	4TH FL OFFICE RM 4025-B	1/30/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-30-17 191200916-0015	4TH FL OFFICE RM 4026-B	1/30/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	

No discernable field blanks submitted with this sample set.

Initial report from 02/02/2012 17:11:09

Analyst(s)

Elluz Chong Qui (15)

Joe Centifonti, Laboratory Manager  
 or other approved signatory

Limit of detection is 7 fibers/mm<sup>2</sup>. Intra-laboratory Sr values: 5-20 fibers = 0.33, 21-50 fibers = 0.26, 51-100 fibers = 0.16. Inter-laboratory Sr values (Average of EMSL round robin data) = 0.29. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. EMSL is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. Results have been blank corrected as applicable. Samples received in good condition unless otherwise noted.  
 Samples analyzed by EMSL Analytical, Inc. Beltsville, MD AIHA-LAP, LLC--IHAP Lab 102891

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2


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10768 Baltimore Avenue, Beltsville, MD 20705

Phone: (301) 937-5700 Fax: (301) 937-5701 Email: beltsvillelab@emsl.com

Attn: **Brian Chapman**  
**Global Consulting, Inc.**  
**1818 New York Avenue N.E.**  
**Suite 111**  
**Washington, DC 20002**

Customer ID: GLOC62  
 Customer PO:  
 Received: 02/01/12 8:30 AM  
 EMSL Order: 191200935

Fax: (202) 832-1434 Phone: (202) 832-1433  
 Project: **NEOB/ R0292**

EMSL Proj:  
 Analysis Date: 2/2/2012

**Test Report: Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method,  
 Revision 3, Issue 2, 8/15/94**

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/ mm <sup>2</sup>	Fibers/ cc	Notes
JR-01-31-04 191200935-0001	B1 MAIN VAULT BACK ROOM B112	1/31/2012	1200.00	42	100	0.002	53.5	0.017	
JR-01-31-05 191200935-0002	CARPENTER SHOP RAISED ROOM	1/31/2012	1200.00	14	100	0.002	17.8	0.006	
JR-01-31-06 191200935-0003	B1 ROOM B226	1/31/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-31-07 191200935-0004	B1 SHEET METAL ROOM B238	1/31/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-31-08 191200935-0005	ELEVATOR SHOP	1/31/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-31-09 191200935-0006	ELEVATOR SHOP OFFICE	1/31/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-31-10 191200935-0007	2ND FLOOR OFFICE ROOM 2020	1/31/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-31-11 191200935-0008	2ND FL OFFICE RM 2020 WENDY ANDERSON	1/31/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-31-12 191200935-0009	2ND FLOOR GYM	1/31/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-31-13 191200935-0010	2ND FLOOR CAFETERIA	1/31/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	

Initial report from 02/02/2012 17:11:30

Analyst(s)

Elluz Chong Qui (14)

Joe Centifonti, Laboratory Manager  
 or other approved signatory

Limit of detection is 7 fibers/mm<sup>2</sup>. Intra-laboratory Sr values: 5-20 fibers = 0.33, 21-50 fibers = 0.26, 51-100 fibers = 0.16. Inter-laboratory Sr. values (Average of EMSL round robin data) = 0.29. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. EMSL is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. Results have been blank corrected as applicable. Samples received in good condition unless otherwise noted.  
 Samples analyzed by EMSL Analytical, Inc. Beltsville, MD AIHA-LAP, LLC--IHAP Lab 102891

Test Report PCM-7.22.0 Printed: 2/2/2012 5:11:31 PM

1




**EMSL Analytical, Inc.**

10768 Baltimore Avenue, Beltsville, MD 20705

Phone: (301) 937-5700 Fax: (301) 937-5701 Email: beltsvillelab@emsl.com

Attn: **Brian Chapman**  
**Global Consulting, Inc.**  
**1818 New York Avenue N.E.**  
**Suite 111**  
**Washington, DC 20002**

Customer ID: GLOC62  
 Customer PO:  
 Received: 02/01/12 8:30 AM  
 EMSL Order: 191200935

Fax: (202) 832-1434 Phone: (202) 832-1433  
 Project: **NEOB/ R0292**

EMSL Proj:  
 Analysis Date: 2/2/2012

**Test Report: Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method,  
 Revision 3, Issue 2, 8/15/94**

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/ mm <sup>2</sup>	Fibers/ cc	Notes
JR-01-31-14 191200935-0011	2ND FLOOR CAFETERIA KITCHEN	1/31/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-31-15 191200935-0012	B1 RM B112	1/31/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-31-16 191200935-0013	B1 RM B101	1/31/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-01-31-17 191200935-0014	B1 RM CARPENTER SHOP	1/31/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	

No discernable field blanks submitted with this sample set.

Initial report from 02/02/2012 17:11:30

Analyst(s)

Elluz Chong Qui (14)

Joe Centifonti, Laboratory Manager  
 or other approved signatory

Limit of detection is 7 fibers/mm<sup>2</sup>. Intra-laboratory Sr values: 5-20 fibers = 0.33, 21-50 fibers = 0.26, 51-100 fibers = 0.16. Inter-laboratory Sr. values (Average of EMSL round robin data) = 0.29. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. EMSL is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. Results have been blank corrected as applicable. Samples received in good condition unless otherwise noted.  
 Samples analyzed by EMSL Analytical, Inc. Beltsville, MD AIHA-LAP, LLC-IHLAP Lab 102891

Test Report PCM-7.22.0 Printed: 2/2/2012 5:11:31 PM

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2


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10768 Baltimore Avenue, Beltsville, MD 20705

Phone: (301) 937-5700 Fax: (301) 937-5701 Email: beltsvillelab@emsl.com

Attn: **Brian Chapman**  
**Global Consulting, Inc.**  
**1818 New York Avenue N.E.**  
**Suite 111**  
**Washington, DC 20002**

Customer ID: GLOC62  
 Customer PO:  
 Received: 02/02/12 10:20 AM  
 EMSL Order: 191200993

Fax: (202) 832-1434 Phone: (202) 832-1433  
 Project: **NEOB/R0292**

EMSL Proj:  
 Analysis Date: 2/2/2012

**Test Report: Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method,  
 Revision 3, Issue 2, 8/15/94**

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/ mm <sup>2</sup>	Fibers/ cc	Notes
JR-02-01-03 191200993-0001	PENN HOUSE LOCKER E	2/1/2012	1200.00	25	100	0.002	31.8	0.010	
JR-02-01-04 191200993-0002	PENN HOUSE AHU 3	2/1/2012	1200.00	28	100	0.002	35.7	0.011	
JR-02-01-05 191200993-0003	PENN HOUSE B7.F.29.3 DOOR	2/1/2012	1200.00	17	100	0.002	21.7	0.007	
JR-02-01-06 191200993-0004	PENN HOUSE AIR SHAPFT F.272	2/1/2012	1200.00	10.5	100	0.002	13.4	0.004	
JR-02-01-07 191200993-0005	PENN HOUSE AIR SHAFT F.276	2/1/2012	1200.00	33	100	0.002	42.0	0.013	
JR-02-01-08 191200993-0006	PENN HOUSE AHU 4	2/1/2012	1200.00	21.5	100	0.002	27.4	0.009	
JR-02-01-09 191200993-0007	PENN HOUSE BX.173	2/1/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-02-01-10 191200993-0008	PENN HOUSE AHU 11	2/1/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-02-01-11 191200993-0009	PENN HOUSE F.27-1	2/1/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
JR-02-01-12 191200993-0010	B2 TANK ROOM	2/1/2012	1200.00	<5.5	100	0.002	<7.0	<0.002	

Initial report from 02/02/2012 17:12:17

Analyst(s)

Elluz Chong Qui (15)

Joe Centifonti, Laboratory Manager  
 or other approved signatory

Limit of detection is 7 fibers/mm<sup>2</sup>. Intra-laboratory Sr values: 5-20 fibers = 0.33, 21-50 fibers = 0.26, 51-100 fibers = 0.16. Inter-laboratory Sr. values (Average of EMSL round robin data) = 0.29. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. EMSL is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. Results have been blank corrected as applicable. Samples received in good condition unless otherwise noted.  
 Samples analyzed by EMSL Analytical, Inc. Beltsville, MD AIHA-LAP, LLC--IHAP Lab 102891


**EMSL Analytical, Inc.**

10768 Baltimore Avenue, Beltsville, MD 20705

Phone: (301) 937-5700 Fax: (301) 937-5701 Email: beltsvillelab@emsl.com

Attn: **Brian Chapman**  
**Global Consulting, Inc.**  
**1818 New York Avenue N.E.**  
**Suite 111**  
**Washington, DC 20002**

Customer ID: GLOC62  
 Customer PO:  
 Received: 02/02/12 10:20 AM  
 EMSL Order: 191200993

Fax: (202) 832-1434 Phone: (202) 832-1433  
 Project: **NEOB/R0292**

EMSL Proj:  
 Analysis Date: 2/2/2012

**Test Report: Fiber Count by Phase Contrast Microscopy (PCM), NIOSH 7400 Method,  
 Revision 3, Issue 2, 8/15/94**

Sample	Location	Sample Date	Volume (liters)	Fibers	Fields	LOD (fib/cc)	Fibers/ mm <sup>2</sup>	Fibers/ cc	Notes
JR-02-01-13	B2 CHILLER 2	2/1/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
191200993-0011									
JR-02-01-14	B2 LOCKER ROOM	2/1/2012	1200.00	6.5	100	0.002	8.28	0.003	
191200993-0012									
JR-02-01-15	B2 SUPERVISOR HALLWAY	2/1/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
191200993-0013									
JR-02-01-16	B2 GARAGE WATER TREATMENT	2/1/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
191200993-0014									
JR-02-01-17	B2 GARAGE SHOP STORAGE	2/1/2012	1200.00	<5.5	100	0.002	<7.01	<0.002	
191200993-0015									

No discernable field blanks submitted with this sample set.

Initial report from 02/02/2012 17:12:17

Analyst(s)

Elluz Chong Qui (15)

Joe Centifonti, Laboratory Manager  
 or other approved signatory

Limit of detection is 7 fibers/mm<sup>2</sup>. Intra-laboratory Sr values: 5-20 fibers = 0.33, 21-50 fibers = 0.26, 51-100 fibers = 0.16. Inter-laboratory Sr. values (Average of EMSL round robin data) = 0.29. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. EMSL is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. Results have been blank corrected as applicable. Samples received in good condition unless otherwise noted.  
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Test Report PCM-7.22.0 Printed: 2/3/2012 9:34:31 AM

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2

# TEM Laboratory Results


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 Phone: (301) 937-5700 Fax: (301) 937-5701 Email: [beltsvillelab@emsl.com](mailto:beltsvillelab@emsl.com)

Attn: **Samuel Hargadine**  
**Global Consulting, Inc.**  
**1818 New York Avenue N.E.**  
**Suite 111**  
**Washington, DC 20002**

Customer ID: GLOC62  
 Customer PO:  
 Received: 01/31/12 9:35 AM  
 EMSL Order: 191200894

Fax: (202) 832-1434 Phone: (202) 832-1433  
 Project: **R0292- NEOB**

EMSL Proj:  
 Analysis Date: 1/31/2012

### Test Report: Asbestos Analysis of Air Samples by Transmission Electron Microscopy via NIOSH Method 7402

Sample	Volume (Liters)	Non Asbestos Fibers	PCM F/cc	Asbestos Type(s)	Asbestos Fibers	Asbestos % of total	7402 Adjusted (TEM) F/cc	Notes
R0292/012312/09 191200894-0001	1211	83	0.066			0	<0.002	PCM Data From Client
R0292/012312/10 191200894-0002	1211	31	0.028			0	<0.002	PCM Data From Client
R0292/012312/11 191200894-0003	1211	32	0.036			0	<0.002	PCM Data From Client
R0292/012312/12 191200894-0004	1211	42	0.032			0	<0.002	PCM Data From Client
R0292/012312/14 191200894-0005	1211	115	0.044			0	<0.002	PCM Data From Client
R0292/012312/15 191200894-0006	1211	65	0.064			0	<0.002	PCM Data From Client

NIOSH 7402 method only reports fibers  $\geq 5\mu\text{m}$  in length and  $\geq 0.25\mu\text{m}$  in width.  
 This method requires 2 field blank analyses per set. Since no blanks were analyzed, the results are not blank corrected.  
 Average number of asbestos fibers on field blanks: n/a  
 Average number of non-asbestos fibers on field blanks: n/a

Initial report from 02/01/2012 09:18:54

Analyst(s)

Brett Macey (6)

Joe Centifonti, Laboratory Manager  
 or other approved signatory

EMSL is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. The above report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL Analytical, Inc. The test results contained within this report meet the requirements of NELAC unless otherwise noted. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Samples analyzed by EMSL Analytical, Inc. Beltsville, MD

Test Report TEM7402-7.21.0 Printed: 2/1/2012 9:18:54 AM

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1

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Attn: **Brian Chapman**  
**Global Consulting, Inc.**  
**1818 New York Avenue N.E.**  
**Suite 111**  
**Washington, DC 20002**

Customer ID: GLOC62  
 Customer PO:  
 Received: 02/07/12 9:30 AM  
 EMSL Order: 191201142

Fax: (202) 832-1434 Phone: (202) 832-1433  
 Project: **NEOB - R0292**

EMSL Proj:  
 Analysis Date: 2/7/2012

**Test Report: Asbestos Analysis of Air Samples by Transmission Electron Microscopy  
 via NIOSH Method 7402**

<i>Sample</i>	<i>Volume (Liters)</i>	<i>Non Asbestos Fibers</i>	<i>PCM F/cc</i>	<i>Asbestos Type(s)</i>	<i>Asbestos Fibers</i>	<i>Asbestos % of total</i>	<i>7402 Adjusted (TEM) F/cc</i>	<i>Notes</i>
JR-1-31-04 191201142-0001	1200	29	0.018			0	<0.002	PCM Data From Client

NIOSH 7402 method only reports fibers  $\geq 5\mu\text{m}$  in length and  $\geq 0.25\mu\text{m}$  in width.  
 This method requires 2 field blank analyses per set. Since no blanks were analyzed, the results are not blank corrected.  
 Average number of asbestos fibers on field blanks: n/a  
 Average number of non-asbestos fibers on field blanks: n/a

Initial report from 02/07/2012 14:09:26

Analyst(s)

Brett Macey (1)

Joe Centifonti, Laboratory Manager  
 or other approved signatory

EMSL is not responsible for data reported in fibers/cc, which is dependent on volume collected by non-laboratory personnel. The above report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL Analytical, Inc. The test results contained within this report meet the requirements of NELAC unless otherwise noted. The test results contained within this report meet the requirements of NELAC unless otherwise noted. Samples received in good condition unless otherwise noted. Samples analyzed by EMSL Analytical, Inc. Beltsville, MD

Test Report TEM7402-7.21.0 Printed: 2/7/2012 2:09:26 PM

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1

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10768 Baltimore Avenue, Beltsville, MD 20705

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Attn: **Brian Chapman**  
**Global Consulting, Inc.**  
**1818 New York Avenue N.E.**  
**Suite 111**  
**Washington, DC 20002**

Customer ID: GLOC62  
 Customer PO:  
 Received: 02/07/12 10:15 AM  
 EMSL Order: 191201145

Fax: (202) 832-1434 Phone: (202) 832-1433  
 Project: **NEOB - R0292**

EMSL Proj:  
 Analysis Date: 2/7/2012

**Test Report: Asbestos Analysis of Air Samples by Transmission Electron Microscopy  
 via NIOSH Method 7402**

Sample	Volume (Liters)	Non Asbestos Fibers	PCM F/cc	Asbestos Type(s)	Asbestos Fibers	Asbestos % of total	7402 Adjusted (TEM) F/cc	Notes
JR-02-01-03 191201145-0001	1200	21	0.010			0	<0.002	PCM Data From Client
JR-02-01-04 191201145-0002	1200	14	0.011			0	<0.002	PCM Data From Client
JR-02-01-07 191201145-0003	1200	46	0.013			0	<0.002	PCM Data From Client

NIOSH 7402 method only reports fibers  $\geq 5\mu\text{m}$  in length and  $\geq 0.25\mu\text{m}$  in width.  
 This method requires 2 field blank analyses per set. Since no blanks were analyzed, the results are not blank corrected.  
 Average number of asbestos fibers on field blanks: n/a  
 Average number of non-asbestos fibers on field blanks: n/a

Initial report from 02/07/2012 14:11:33

Analyst(s)

Brett Macey (3)

Joe Centifonti, Laboratory Manager  
 or other approved signatory

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Test Report TEM7402-7.21.0 Printed: 2/7/2012 2:11:33 PM

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1

# Chains of Custody



191200786

10/21/11 10:41



## Asbestos Lab Services Chain of Custody

EMSL Order Number (Lab Use Only):

191200786

 Beltsville, MD  
 10768 Baltimore Ave  
 Beltsville, MD 207  
 PHONE: (301) 937-57  
 FAX: (301) 937-57

Company: Global Consulting, Inc.		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different
Street: 1818 New York Ave., Suite 1111		If Bill to is Different note instructions in Comments**
City/State/Zip: Washington, DC 20002		Third Party Billing requires written authorization from third party
Report To (Name): Samuel Hargadine	Fax:	
Telephone: 202-465-0377	Email Address: sam.hargadine@gmail.com	
Project Name/Number: R0292-N203		
Please Provide Results: Email	Purchase Order:	State Samples Taken: DC

Turnaround Time (TAT) Options* - Please Check							
<input type="checkbox"/> 3 Hour	<input type="checkbox"/> 6 Hour	<input type="checkbox"/> 24 Hour	<input type="checkbox"/> 48 Hour	<input checked="" type="checkbox"/> 72 Hour	<input type="checkbox"/> 96 Hour	<input type="checkbox"/> 1 Week	<input type="checkbox"/> 2 Week

\*For TEM Air 3 hr through 6 hr, please call ahead to schedule. \*There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.

<b>PCM - Air</b> <input type="checkbox"/> Check if samples are from NY <input checked="" type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA <b>PLM - Bulk (reporting limit)</b> <input type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)	<b>TEM - Air</b> <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 <b>TEM - Bulk</b> <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 <b>TEM - Water:</b> EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	<b>TEM-Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) <b>Soil/Rock/Vermiculite</b> <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) <b>Other:</b> <input type="checkbox"/>
---	--	---

☐ Check For Positive Stop - Clearly Identify Homogenous Group Filter Pore Size (Air Samples): ☐ 0.8µm ☐ 0.45µm

Samplers Name:		Samplers Signature:	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
R0292/012312/01	10th floor, stairwell #1	1207.5	1-23-12
R0292/012312/02	, 10202		
R0292/012312/03	, Drew Perrault's office		
R0292/012312/04	, Suite E		
R0292/012312/05	, Wendy Liberante's office		
R0292/012312/06	, next to 10236 C		
R0292/012312/07	, 10235 F		
R0292/012312/08	, copy room by elevator		

Client Sample # (s):	Total # of Samples:
Relinquished (Client): <i>[Signature]</i> Date: 11/27/12	Time:
Received (Lab): <i>[Signature]</i> Date: 11/27/12	Time: 9:55 AM
Comments/Special Instructions:	

Beltsville  
10768 Baltimore Ave  
Beltsville, MD  
PHONE: (301) 931-1111  
FAX: (301) 931-1112



\_\_\_\_\_

Controlled Document – Asbestos Lab Services COC – A1.0 – 11/23/2009

[http://www.emsl.com/COC\\_Print.cfm](http://www.emsl.com/COC_Print.cfm)

Page



**AMA Analytical Services, Inc.**  
A Specialized Environmental Laboratory

## CERTIFICATE OF ANALYSIS



<b>Client:</b>	Global Consulting, Inc.	<b>Job Name:</b>	NEOB	<b>Chain Of Custody:</b>	220700
<b>Address:</b>	1818 New York Avenue, NE, Suite 111 Washington, DC 20002	<b>Job Location:</b>	9th Floor Office	<b>Date Submitted:</b>	1/25/2012
		<b>Job Number:</b>	R0292	<b>Person Submitting:</b>	J. Rodriguez
		<b>P.O. Number:</b>	Not Provided	<b>Date Analyzed:</b>	1/30/2012
<b>Attention:</b>	Brian			<b>Report Date:</b>	1/30/2012
				<b>Date Sampled:</b>	1/24/2012

### Summary of Phase Contrast Microscopy

Page 2 of 2

AMA Sample Number	Client Sample Number	Volume Sampled (Liters)	Fibers Per Millimeter Squared	Fibers Per Cubic Centimeter	Analyst I.D.	Sample Type	Comments
-------------------	----------------------	-------------------------	-------------------------------	-----------------------------	--------------	-------------	----------

\* The Reporting Limit for AMA Laboratory is 7.0 fibers per square millimeter of filter. The reporting limit for the air concentration of fibers (f/cc) is dependent on the sampled air volume. Fibers counts were determined by the methods described in NIOSH Analytical Method 7400, "Fibers" (Revision 3, Issue 2, 8/15/94). All personnel samples were analyzed following the OSHA Reference Method.

Note: All samples were received in good condition unless otherwise noted.  
Uncertainty: for fibers/mm<sup>2</sup> in the range of 7-25 the SR is 0.305, 26-64 SR=0.264, 64-127 SR=0.302, >127 SR=0.344  
Sample results shown here have been corrected for any field blank(s) submitted with this sample set.

All results are to be considered preliminary and subject to change unless signed by the Technical Director or Deputy.

Technical Director

G Edward Carney

Analyst(s)

Robert Privette

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these Laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from us. Sample types, locations, and collection protocols are based upon the information provided by the persons submitting them and, unless collected by personnel of these Laboratories, we expressly disclaim any knowledge and liability for the accuracy and completeness of this information. Residual sample material will be discarded in accordance with the appropriate regulatory guidelines, unless otherwise requested by the client. NVLAP accreditation applies only to polarized light microscopy of bulk samples and transmission electron microscopy of AHERA air samples. This report must not be used to claim, and does not imply product certification, approval, or endorsement by NVLAP, NVLAP, NIST, or any agency of the Federal Government. All rights reserved. AMA Analytical Services, Inc.

An AIHA (#100470), NVLAP (#101143-0), and NY ELAP (#10920) Accredited Laboratory

4475 Forbes Blvd. • Lanham, MD, 20706 • (301) 459-2640 • Toll Free (800) 346-0961 • Fax (301) 459-2643









**AMA Analytical Services, Inc.**  
 Focused on Results  
 www.ama-lab.com  
 AIHA (#100470) NVLAP (#101143-0) NY ELAP (10920)  
 4475 Forbes Blvd. • Lanham, MD 20706  
 (301) 459-2640 • (800) 346-0961 • Fax (301) 459-2643

## CHAIN OF CUSTODY

(Please Refer To This  
 Number For Inquiries)

2207010

### Mailing/Billing Information:

1. Client Name: Global Cos.  
 2. Address 1: 1515 New York Ave  
 3. Address 2: Washington, D.C. 20002  
 4. Address 3: \_\_\_\_\_  
 5. Phone #: 202 540 2360 Fax #: \_\_\_\_\_

### Submital Information:

1. Job Name: PCOB  
 2. Job Location: 9th floor office  
 3. Job #: 10297 P.O. #: \_\_\_\_\_  
 4. Contact Person: Brian  
 5. Submitted by: 10/20/2000 Signature: [Signature]  
 @ phone # (202) 540 2360

Reporting Info (Results provided as soon as technically feasible). If no TAT/Reporting Info is provided, AMA will assign defaults of 5-Day and email/fax to contacts on file.

### AFTER HOURS (must be pre-scheduled)

☐ Immediate Date Due: \_\_\_\_\_  
☐ 24 Hours Time Due: \_\_\_\_\_  
 Comments: \_\_\_\_\_

### NORMAL BUSINESS HOURS

☐ Immediate  
☐ Next Day  
☒ 3 Day  
☐ 5 Day +  
 Date Due: 10/20/2000  
☐ Results Required By Noon

### REPORT TO:

☐ Include COC/Field Data Sheets with Report  
☒ Email: blanchard@ama-lab.com  
☐ Fax: \_\_\_\_\_  
☐ Verbal: \_\_\_\_\_

### Asbestos Analysis

PCM Air - Please Indicate Filter Type:  
☒ NIOSH 7400 (QTY) \_\_\_\_\_  
☐ Fiberglass (QTY) \_\_\_\_\_  
 TEM Air\* - Please Indicate Filter Type:  
☐ AHERA (QTY) \_\_\_\_\_  
☐ NIOSH 7402 (QTY) \_\_\_\_\_  
☐ Other (specify) \_\_\_\_\_ (QTY) \_\_\_\_\_  
 PLM Bulk  
☐ EPA 600 - Visual Estimate (QTY) \_\_\_\_\_  
☐ EPA Point Count (QTY) \_\_\_\_\_  
☐ NY State Frangible 198.4 (QTY) \_\_\_\_\_  
☐ Gray Reduction ELAP 198.6 (QTY) \_\_\_\_\_  
☐ Other (specify) \_\_\_\_\_ (QTY) \_\_\_\_\_  
 MISC  
☐ Vermiculite  
☐ Asbestos Soil PLM (Qual) PLM (Quant) PLM/TEM (Qual) PLM/TEM (Quant)  
 \*It is recommended that blank samples be submitted with all air and surface samples

### TEM Bulk

☐ ELAP 198.4/Chaffield (QTY) \_\_\_\_\_  
☐ NY State PLM/TEM (QTY) \_\_\_\_\_  
☐ Residual Ash (QTY) \_\_\_\_\_  
 TEM Dust\*  
☐ Qual. (pres/abs) Vacuum/Dust (QTY) \_\_\_\_\_  
☐ Quant. (starec) Vacuum D5755-95 (QTY) \_\_\_\_\_  
☐ Quant. (starec) Dust D6480-99 (QTY) \_\_\_\_\_  
 TEM Water  
☐ Qual. (pres/abs) (QTY) \_\_\_\_\_  
☐ ELAP 198.2/EPA 100.2 (QTY) \_\_\_\_\_  
☐ EPA 100.1 (QTY) \_\_\_\_\_

### Metals Analysis

☐ Pb Paint Chip (QTY) \_\_\_\_\_  
☐ Pb Dust Wipe (wipe type) \_\_\_\_\_ (QTY) \_\_\_\_\_  
☐ \*Pb Air (QTY) \_\_\_\_\_  
☐ Pb Soil/Solid (QTY) \_\_\_\_\_  
☐ Pb TCLP (QTY) \_\_\_\_\_  
☐ Drinking Water ☐ Pb (QTY) ☐ Cu (QTY) ☐ As (QTY) \_\_\_\_\_  
☐ Waste Water ☐ Pb (QTY) ☐ Cu (QTY) ☐ As (QTY) \_\_\_\_\_  
☐ Pb Furnace Media (QTY) \_\_\_\_\_  
☐ Other (specify) \_\_\_\_\_ (QTY) \_\_\_\_\_

### Fungal Analysis

Collection Apparatus for Spore Traps/Air Samples: \_\_\_\_\_  
 Collection Media  
☐ \*Spore Trap (QTY) \_\_\_\_\_  
☐ \*Surface Swab (QTY) \_\_\_\_\_  
☐ \*Surface Tape (QTY) \_\_\_\_\_  
☐ Other (specify) \_\_\_\_\_ (QTY) \_\_\_\_\_  
☐ Surface Vacuum Dust (QTY) \_\_\_\_\_  
☐ Culturable ID Genus (Media) \_\_\_\_\_ (QTY) \_\_\_\_\_  
☐ Culturable ID Species (Media) \_\_\_\_\_ (QTY) \_\_\_\_\_

### CLIENT INFORMATION

### DATE/TIME

### Wipe Area

### ANALYSIS

### MATRIX

### WATER AND OTHER

### SPORE TRAP

### TAPE

### SWAB

### CLIENT CONTACT

### LABORATORY STAFF ONLY

### DATE/TIME

### CONTACT

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### DATE/TIME

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### BY:

# CERTIFICATE OF ANALYSIS

Client: Global Consulting, Inc. Job Name: NEOB Chain Of Custody: 220702  
Address: 1818 New York Avenue, NE, Suite 111 Job Location: 8th Floor Office Date Submitted: 1/26/2012  
Job Number: R0292 Person Submitting: J. Rodriguez  
P.O. Number: Not Provided Date Analyzed: 1/31/2012 Report Date: 1/31/2012  
Attention: Brian Chapman Date Sampled: 1/25/2012

## Summary of Phase Contrast Microscopy

Page 2 of 2

AMA Sample Number	Client Sample Number	Volume Sampled (Liters)	Fibers Per Millimeter Squared	Fibers Per Cubic Centimeter	Analyst ID	Sample Type	Comments
-------------------	----------------------	-------------------------	-------------------------------	-----------------------------	------------	-------------	----------

\* The Reporting Limit for AMA Laboratory is 7.0 fibers per square millimeter of filter. The reporting limit for the air concentration of fibers (f/cc) is dependent on the sampled air volume. Fibers counts were determined by the methods described in NIOSH Analytical Method 7400, Fibers (Revision 3, Issue 2, 8/13/94). All personnel samples were analyzed following the OSHA Reference Method.

Note: All samples were received in good condition unless otherwise noted. Uncertainty: for fibers/mm<sup>2</sup> in the range of 7.25 the SR is 0.305, 26-64 SR=0.264, 64-127 SR=0.302, > 127 SR=0.344. Sample results shown here have been corrected for any field blank(s) submitted with this sample set.

All results are to be considered preliminary and subject to change unless signed by the Technical Director or Deputy.

Technical Director: G Edward Conney Analyst(s): Robert Privette

*Robert Privette*

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these Laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from us. Sample types, locations, and collection protocols are based upon the information provided by the persons submitting them and, unless collected by personnel of these Laboratories, we expressly disclaim any knowledge and liability for the accuracy and completeness of this information. Residual sample material will be discarded in accordance with the appropriate regulatory guidelines, unless otherwise requested by the client. NVLAP accreditation applies only to polarized light microscopy of bulk samples and transmission electron microscopy of AIHRA air samples. This report must not be used to claim, and does not imply product certification, approval, or endorsement by NVLAP, AIHRA, NIOSH, or any agency of the Federal Government. All rights reserved. AMA Analytical Services, Inc.

An AIHRA (#100470), NVLAP (#101143-0), and NY ELAP (#10920) Accredited Laboratory  
4475 Forbes Blvd. - Lanham, MD, 20706 • (301) 459-2640 • Toll Free (800) 346-0961 • Fax (301) 459-2643

**AMA Analytical Services, Inc.**  
 Focused on Results www.amaab.com  
 AHRA (#100470) NYLAP (#10143-0) NY ELAP (10920)  
 4475 Forbes Blvd. • Latham, MD 20706  
 (301) 459-2640 • (800) 346-0961 • Fax (301) 459-2643

(Please Refer To This  
 Number For Inquiries)

220702

pg 1 of 2

# CHAIN OF CUSTODY

## Mailing/Billing Information:

1. Client Name: Global Cons.  
 2. Address 1: 1318 New York Ave  
 3. Address 2: Wash. D.C  
 4. Address 3: 2200 L  
 5. Phone: (202) 368-1376 Fax #:

## Submittal Information:

1. Job Name: NEOB  
 2. Job Location: 812 door office  
 3. Job #/ # of: 6012  
 4. Contact Person: Brian  
 5. Submitted by: J. J. J. J.  
 Signature: [Signature]  
 Date: 2012-08-13

Reporting Info (Results provided as soon as technically feasible). If no TAT/Reporting Info is provided, AMA will assign defaults of 5-day and email/fax to contacts on file.

AFTER HOURS (must be pre-scheduled)		NORMAL BUSINESS HOURS	
<input type="checkbox"/> Immediate	Date Due: _____	<input checked="" type="checkbox"/> 1 Day	Date Due: <u>1/31/12</u>
<input type="checkbox"/> 24 Hours	Date Due: _____	<input type="checkbox"/> 2 Day	Date Due: _____
Comments: _____		Results Required By Noon <input type="checkbox"/>	

Asbestos Analysis		Mold Analysis	
<input type="checkbox"/> TEM Bulk <input type="checkbox"/> ELAP 198, 498, Chafid <input type="checkbox"/> NY State PLM/TEM <input type="checkbox"/> Residential Ash <input type="checkbox"/> TEM Bulk <input type="checkbox"/> (residue) Vacuum/Dust <input type="checkbox"/> QNASH 7402 <input type="checkbox"/> QNASH 7402 <input type="checkbox"/> Other (specify) _____ (QTY) <input type="checkbox"/> EPA 600 - Visual Estimate <input type="checkbox"/> NY State Frangible 198.1 <input type="checkbox"/> NY State Frangible 198.6 <input type="checkbox"/> Other (specify) _____ (QTY)	<input type="checkbox"/> TEM Bulk <input type="checkbox"/> ELAP 198, 498, Chafid <input type="checkbox"/> NY State PLM/TEM <input type="checkbox"/> Residential Ash <input type="checkbox"/> TEM Bulk <input type="checkbox"/> (residue) Vacuum/Dust <input type="checkbox"/> QNASH 7402 <input type="checkbox"/> QNASH 7402 <input type="checkbox"/> Other (specify) _____ (QTY) <input type="checkbox"/> EPA 600 - Visual Estimate <input type="checkbox"/> NY State Frangible 198.1 <input type="checkbox"/> NY State Frangible 198.6 <input type="checkbox"/> Other (specify) _____ (QTY)	<input type="checkbox"/> Pb Paint Chip <input type="checkbox"/> Pb Paint Wipe (wipe type) _____ (QTY) <input type="checkbox"/> Pb Air <input type="checkbox"/> Pb Soil/Solid <input type="checkbox"/> Pb TCLP <input type="checkbox"/> Drinking Water <input type="checkbox"/> Wastewater <input type="checkbox"/> Pb Furnace (Media) _____ (QTY)	<input type="checkbox"/> Pb Paint Chip <input type="checkbox"/> Pb Paint Wipe (wipe type) _____ (QTY) <input type="checkbox"/> Pb Air <input type="checkbox"/> Pb Soil/Solid <input type="checkbox"/> Pb TCLP <input type="checkbox"/> Drinking Water <input type="checkbox"/> Wastewater <input type="checkbox"/> Pb Furnace (Media) _____ (QTY)

Fungal Analysis		Collection Apparatus for Spore Traps/Air Samples	
<input type="checkbox"/> Spore Trap <input type="checkbox"/> Surface Swab <input type="checkbox"/> Surface Tape <input type="checkbox"/> Other (specify) _____ (QTY)	<input type="checkbox"/> Spore Trap <input type="checkbox"/> Surface Swab <input type="checkbox"/> Surface Tape <input type="checkbox"/> Other (specify) _____ (QTY)	<input type="checkbox"/> Spore Trap <input type="checkbox"/> Surface Swab <input type="checkbox"/> Surface Tape <input type="checkbox"/> Other (specify) _____ (QTY)	<input type="checkbox"/> Spore Trap <input type="checkbox"/> Surface Swab <input type="checkbox"/> Surface Tape <input type="checkbox"/> Other (specify) _____ (QTY)

CLIENT ID #	SAMPLE INFORMATION				ANALYSIS				MATRIX				CLIENT CONTACT	
	DATE/TIME	TIME	VOL (L/V)	W/AREA	DATE/TIME	TIME	VOL (L/V)	W/AREA	DATE/TIME	TIME	VOL (L/V)	W/AREA	DATE/TIME	TIME
14-01-25-02	8/14/12	12:00	12.00	12.00										
-01	11	8:20												
-05	11	8:22												
-06	11	8:23												
-07	11	8:23												
-08	11	8:23												
-09	11	8:23												
-10	11	8:02												
-11	11	8:02												
-12	11	8:02												
-13	11	8:00												
-14	11	8:09												

LABORATORY		By (Print):	
1. Date/Time RCVD:	1/31/12 @ 8:00	1/31/12 @ 8:00	1/31/12 @ 8:00
2. Date/Time Analyzed:	1/31/12 @ 8:00	1/31/12 @ 8:00	1/31/12 @ 8:00
3. Results Reported To:	Brian	Brian	Brian
4. Comments:			





**AMA Analytical Services, Inc.**  
Focused on Results www.ama-lab.com  
AIHA (#100470) NVLAP (#101143-0) NY ELAP (10920)  
4475 Forbes Blvd. • Lanham, MD 20706  
(301) 459-2640 • (800) 346-0961 • Fax (301) 459-2643

## CHAIN OF CUSTODY

(Please Refer To This Number For Inquiries)

2207032

**Mailing/Billing Information:** *Global Cons.*  
1. Client Name: *Global Cons.*  
2. Address 1: *1813 New York Ave.*  
3. Address 2: *Wash, D.C. 20002*  
4. Address 3:  
5. Phone #: *(202) 368-1376* Fax #: *(202) 368-1376*

### Submittal Information:

1. Job Name: *NEOB*  
2. Job Location: *8th floor office*  
3. Job #: *6092* P.O. #: *(202) 368-1376*  
4. Contact Person: *John* @ phone #:  
5. Submitted by: *J. J. J. J.* Signature: *[Signature]*

REPORT TO:  
☐ Include COC/Field Data Sheets with Report  
☐ Email: *brin@ama-lab.com* @ *G.H.I./com*  
☐ Fax:  
☐ Verbal:

### NORMAL BUSINESS HOURS

☒ 5 Day  
☐ 24 Hours  
☐ Immediate  
☐ Next Day  
☐ 2 Day  
Date Due:

Reporting Info (Results provided as soon as technically feasible). If no TAT/Reporting Info is provided, AMA will assign defaults of 5-Day and email/fax to contacts on file.

☐ Results Required By Noon  
Date Due:

### Asbestos Analysis

\*PCMLAR - Please Indicate Filter Type:

☒ FIBERGLASS

TEM Air - Please Indicate Filter Type:

☐ AIHERA

☐ NIOSH 7402

☐ Other (specify):

PLM Bulk: (QTY)

☐ EPA 600 - Visual Estimate (QTY)

☐ EPA Point Count (QTY)

☐ NY State Frangible 198.1 (QTY)

☐ Grav. Reduction ELAP 198.6 (QTY)

☐ Other (specify): (QTY)

MISC

☐ Verminicide

☐ Aerosol Seal PAM (Qual) PLM (Qual) PLM/TEM (Qual) PLM/TEM (Qual)

☐ If it is recommended that blank samples be submitted with all air and surface samples

TEM Bulk:

☐ ELAP 198.4/Charfield (QTY)

☐ NY State PLM/TEM (QTY)

☐ Residual Ash (QTY)

TEM Dust\* (QTY)

☐ Qual. (pres/dhs) Vacuum/Dust (QTY)

☐ Quant. (dhs) Vacuum D5755-95 (QTY)

☐ Quant. (dhs) Dust D6480-99 (QTY)

TEM Water (QTY)

☐ Qual. (pres/dhs) (QTY)

☐ ELAP 198.2/EPA 100.2 (QTY)

☐ EPA 100.1 (QTY)

☐ All samples received in good condition unless otherwise noted.

TEM Water samples (°C)

If field data sheets are submitted, there is no need to complete bottom section.

ANALYSIS

PCMLAR

TEM

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# AMA Analytical Services, Inc.



A Specialized Environmental Laboratory

Client: Global Consulting, Inc.

Address: 1818 New York Avenue, NE, Suite 111  
Washington, DC 20002

Attention: Brian Chapman

Job Name: NIOB

Job Location: 7th Floor Office  
Job Number: R0292  
P.O. Number: Not Provided

Chain Of Custody: 220972

Date Submitted: 1/27/2012  
Person Submitting: J. Rodriguez  
Date Analyzed: 2/1/2012  
Report Date: 2/1/2012  
Date Sampled: 1/26/2012



## CERTIFICATE OF ANALYSIS

### Summary of Phase Contrast Microscopy

AMA Sample Number	Client Sample Number	Volume Sampled (Liters)	Fibers Per Millimeter Squared	Fibers Per Cubic Centimeter	Analyst I.D.	Sample Type	Comments
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\* The Reporting Limit for AMA Laboratory is 7.0 fibers per square millimeter of filter. The reporting limit for the air concentration of fibers (f/cc) is dependent on the sampled air volume. Fibers counts were determined by the methods described in NIOSH Analytical Method 7400, 'Fibers' (Revision 3, Issue 2, 8/15/94). All personnel samples were analyzed following the OSHA Reference Method.

All results are to be considered preliminary and subject to change unless signed by the Technical Director or Deputy.

Technical Director: Andreas Saldívar

Analyst(s): G. Edward Canney

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these Laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from us. Sample types, locations, and collection protocols are based upon the information provided by the person submitting them and, unless collected by personnel of these Laboratories, we expressly disclaim any knowledge and liability for the accuracy and completeness of information received from third parties. Results are preliminary and subject to change. This report is not to be used for legal proceedings or for any other purpose without the prior written consent of AMA Analytical Services, Inc. All rights reserved. AMA Analytical Services, Inc.

An AIHA (#100470), NVLAP (#101143-9), and NY ELAP (#10920) Accredited Laboratory  
4475 Forbes Blvd. · Lanham, MD, 20706 · (301) 459-2640 · Toll Free (800) 346-0961 · Fax (301) 459-2643



AMA Analytical Services, Inc.  
Focused on Results  
www.ama-lab.com  
AIHA (#100470) NVLAP (#01145-0) NY ELAP (10920)  
4475 Forbes Blvd. • Latham, MD 20706  
(301) 459-2640 • (800) 346-0961 • Fax (301) 459-2643

## CHAIN OF CUSTODY

(Please Refer To This  
Number For Inquiries)

220972 (P.1/2)

### Mailing/Billing Information:

1. Client Name: Glenn's Cons.

2. Address 1: 1818 New York Ave.

3. Address 2: Wash. D.C. 20002

4. Address 3:

5. Phone #: (202) 601-1112

### Submitted Information:

1. Job Name: NEOB

2. Job Location: 7000 1st Ave.

3. Job #: 1022

4. Contact Person: Brian

5. Submitted by: D. V. K. K. K.

6. Signature: [Signature]

7. Date: 11/12

8. Time: 1:00 PM

9. Initials: [Initials]

10. Comments:

Reporting Info (Results provided as soon as technically feasible). If no TAT/Reporting Info is provided, AMA will assign defaults of 5-10 days and email/fax to contacts on file.

1. Date: 11/12

2. Time: 1:00 PM

3. Initials: [Initials]

4. Comments:

5. Date: 11/12

6. Time: 1:00 PM

7. Initials: [Initials]

8. Comments:

9. Date: 11/12

10. Time: 1:00 PM

11. Initials: [Initials]

12. Comments:

13. Date: 11/12

14. Time: 1:00 PM

15. Initials: [Initials]

16. Comments:

17. Date: 11/12

18. Time: 1:00 PM

19. Initials: [Initials]

20. Comments:

21. Date: 11/12

22. Time: 1:00 PM

23. Initials: [Initials]

24. Comments:

25. Date: 11/12

26. Time: 1:00 PM

27. Initials: [Initials]

28. Comments:

29. Date: 11/12

30. Time: 1:00 PM

31. Initials: [Initials]

32. Comments:

33. Date: 11/12

34. Time: 1:00 PM

35. Initials: [Initials]

36. Comments:

37. Date: 11/12

38. Time: 1:00 PM

39. Initials: [Initials]

40. Comments:

41. Date: 11/12

42. Time: 1:00 PM

43. Initials: [Initials]

44. Comments:

45. Date: 11/12

46. Time: 1:00 PM

47. Initials: [Initials]

48. Comments:

49. Date: 11/12

50. Time: 1:00 PM

51. Initials: [Initials]

52. Comments:

53. Date: 11/12

54. Time: 1:00 PM

55. Initials: [Initials]

56. Comments:





**AIMA Analytical Services, Inc.**  
Focused on Results  
www.aimalab.com  
AIHA (#100470) NVLAP (#01143-0) NY ELAP (0920)  
4475 Forbes Blvd. • Lanham, MD 20706  
(301) 459-2640 • (800) 346-0961 • Fax (301) 459-2643

**Mailing/Billing Information:**  
1. Client Name: Global Cons.  
2. Address 1: 1810 New York Ave  
3. Address 2: Wash. D.C. 20002  
4. Address 3:  
5. Phone # (202) 343-1346 Fax #:  
Comments:

## CHAIN OF CUSTODY

(Please Refer To This  
Number For Inquiries)

220974

### Submitted Information:

1. Job Name: 6th floor office
2. Job Location: 6th floor office
3. Job #: 6092 P.O. #: 2021368-1376
4. Contact Person: J. Rodriguez Signature: [Signature] Phone # 2021368-1376
5. Submitted by: J. Rodriguez Signature: [Signature] Email: gravel.com

REPORT TO: Include COC/Field Trip Sheets with Report

Reporting Info (Results provided as soon as technically feasible). If no TAT/Reporting Info is provided, AIMA will assign defaults of 5 Day and email/fax to contacts on file.  
Normal Business Hours  
After Hours (must be pre-scheduled)  
☐ Immediate ☒ 5 Day ☐ 2 Day  
Date Due: 2/12/12

### Ashbestos Analysis

\*PCMA Air - Please Indicate Filter Type:

☒ HESH 7400 (QTY) ☐ Fiberglass (QTY)

TEM/Air - Please Indicate Filter Type:

☐ AHERA (QTY) ☐ NIOSH 7402 (QTY)

☐ Other specify: (QTY)

PLM Bulk

☐ EPA 600 - Visual Estimate (QTY)

☐ EPA Point Count (QTY)

☐ NY State Friable 198.1 (QTY)

☐ Grav. Reduction ELAP 198.6 (QTY)

☐ Other specify: (QTY)

MISC

☐ Verminicide

☐ Soil BLM (Qual) PLMTEM (Qual) PLMTEM (Qual) PLMTEM (Qual)

\*If field data sheets are submitted, there is no need to complete bottom section.

This is recommended that blank samples be submitted with all air and surface samples.

CLIENT ID #

DATE/ TIME

Wipe Area

ANALYSIS

PLM

TEM

Wipe Area

DATE/ TIME

Wipe Area

ANALYSIS

PLM

TEM

Wipe Area

DATE/ TIME

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### LABORATORY

STAFF ONLY:

(CUSTODY)

Comments:

1. Date/Time RCVD: 2/1/12 @ 1200 Via: 1010

2. Date/Time Analyzed: 2/1/12 @ 1200 By: PRIVETTE

3. Results Reported To: Brian

4. Comments:

By: PRIVETTE

Date: 2/1/12

Time: 1200

Initials: PR

By: PRIVETTE

Date: 2/1/12

Time: 1200

Initials: PR

By: PRIVETTE

Date: 2/1/12

Time: 1200

Initials: PR

By: PRIVETTE

Date: 2/1/12

Time: 1200

Initials: PR

[illegible]

191200916



EMSL ANALYTICAL, INC.  
LABORATORY PRODUCTS TRAINING

# Asbestos Chain of Custody

## EMSL Order Number (Lab Use Only):

191200916

EMSL ANALYTICAL, INC.  
10768 BALTIMORE AVENUE  
BELTSVILLE, MD 20705  
PHONE: (301) 937-5700  
FAX: (301) 937-5701

Company: <u>Global Cons.</u>		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: <u>1818 New York Ave</u>		Third Party Billing requires written authorization from third party	
City: <u>Washington, D.C. 20001</u>	State/Province: <u>D.C.</u>	Zip/Postal Code:	Country:
Report To (Name): <u>Brian Chapman / Jan R.</u>		Fax #:	
Telephone #: <u>(202) 363-1376</u>		Email Address:	
Project Name/Number: <u>NEOS-B0292</u>			
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		Purchase Order: U.S. State Samples Taken: <u>15</u>	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input checked="" type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
<b>PCM - Air</b> <input checked="" type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA <b>PLM - Bulk (reporting limit)</b> <input type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		<b>TEM - Air</b> <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 <b>TEM - Bulk</b> <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 <b>TEM - Water:</b> EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
		<b>TEM - Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) <b>Soil/Rock/Vermiculite</b> <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative)	
		<b>Other:</b> <input type="checkbox"/>	
<input type="checkbox"/> Check For Positive Stop - Clearly Identify Homogeneous Group			
Samplers Name: <u>Jan Rodriguez-703.987.3019</u>		Samplers Signature: <u>[Signature]</u>	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
JR-01-30-03	5th floor office RM# 5002	1200	1/30/12
JR-01-30-04	5th floor office RM# 5003	1200	1/30/12
JR-01-30-05	4th floor office RM# 4004	1200	1/30/12
JR-01-30-06	4th floor office RM# 4002	1200	1/30/12
JR-01-30-07	4th floor office RM# 4001	1200	1/30/12
JR-01-30-08	4th floor office RM# 4003	1200	1/30/12
JR-01-30-09	4th floor office RM# 4007	1200	1/30/12
JR-01-30-10	5th floor office RM# 5001	1200	1/30/12
Client Sample # (s):		Total # of Samples: <u>15</u>	
Relinquished (Client): <u>GSA</u>		Date: <u>1/30/12</u>	Time:
Received (Lab): <u>[Signature]</u>		Date: <u>1/31/12</u>	Time: <u>1:40pm</u>
Comments/Special Instructions:			



191200916

EMSL ANALYTICAL, INC.  
200 ROUTE 130 NORTH  
CINNAMINSON, NJ 08077  
PHONE: (800) 220-3675  
FAX: (856) 786-5974

Analysis Completed in Accordance with EMSL's Terms and Conditions located in the Analytical Price Guide

191200935



# Asbestos Chain of Custody

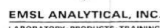
## EMSL Order Number (Lab Use Only):

191200935

EMSL ANALYTICAL, INC.  
10768 BALTIMORE AVENUE  
BELTSVILLE, MD 20705  
PHONE (301) 937-5700  
FAX (301) 937-5701

Company: <u>Global Cons.</u>		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: <u>1313 New York Ave</u>		Third Party Billing requires written authorization from third party	
City: <u>WASH</u>	State/Province: <u>D. C.</u>	Zip/Postal Code:	Country:
Report To (Name): <u>Brian CHAPMAN</u>		Fax #:	
Telephone #: <u>(202) 368-1376</u>		Email Address: <u>brianchapman@global.com</u>	
Project Name/Number: <u>NEOB-10292</u>		U.S. State Samples Taken: <u>14</u>	
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email <input type="checkbox"/> Purchase Order:			
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input checked="" type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
<b>PCM - Air</b> <input checked="" type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA <b>PLM - Bulk (reporting limit)</b> <input type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		<b>TEM - Air</b> <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 <b>TEM - Bulk</b> <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 <b>TEM - Water:</b> EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
		<b>TEM- Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) <b>Soil/Rock/Vermiculite</b> <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) <b>Other:</b>	
<input type="checkbox"/> Check For Positive Stop - Clearly Identify Homogenous Group			
Samplers Name: <u>John Rodriguez / DUSMAN</u>		Samplers Signature: <u>[Signature]</u>	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
JR-01-31-04	BI-Hain Vault Back Room # B112	1200	1/31/12
JR-01-31-05	Carpenter Shop - raised floor	1200	1/31/12
JR-01-31-06	BI-Room # B226	1200	1/31/12
JR-01-31-07	BI-Sheet Metal Room # B238	1200	1/31/12
JR-01-31-08	Elevator Shop	1200	1/31/12
JR-01-31-09	Elevator Shop office	1200	1/31/12
JR-01-31-10	2nd floor office Room # 2020	1200	1/31/12
Client Sample #(s):		Total # of Samples: <u>14</u>	
Relinquished (Client): <u>GSA</u>		Date: <u>1/31/12</u>	Time:
Received (Lab): <u>EEQ Walker</u>		Date: <u>2/1/12</u>	Time: <u>830AM</u>
Comments/Special Instructions:			





**EMSL Order Number** (Lab Use Only):

EMSL ANALYTICAL, INC.  
10768 BALTIMORE AVENUE  
BELTSVILLE, MD 20705  
PHONE: (301) 937-5700  
FAX: (301) 937-5701

[illegible]

191200993



# Asbestos Chain of Custody

## EMSL Order Number (Lab Use Only):

191200993

EMSL ANALYTICAL, INC.  
10768 BALTIMORE AVENUE  
BELTSVILLE, MD 20705  
PHONE (301) 937-5700  
FAX (301) 937-5701

Company: <u>Global Cons.</u>		EMSL-Bill to: <input checked="" type="checkbox"/> Same <input type="checkbox"/> Different If Bill to is Different note instructions in Comments**	
Street: <u>1918 New York Ave</u>		Third Party Billing requires written authorization from third party	
City: <u>WASH</u>	State/Province: <u>D.C.</u>	Zip/Postal Code:	Country:
Report To (Name): <u>Brian</u>		Fax #:	
Telephone #: <u>202 368-1376</u>		Email Address:	
Project Name/Number: <u>NEOB-20292</u>		U.S. State Samples Taken: <u>15</u>	
Please Provide Results: <input type="checkbox"/> Fax <input checked="" type="checkbox"/> Email		Purchase Order:	
Turnaround Time (TAT) Options* - Please Check			
<input type="checkbox"/> 3 Hour <input type="checkbox"/> 6 Hour <input type="checkbox"/> 24 Hour <input type="checkbox"/> 48 Hour <input checked="" type="checkbox"/> 72 Hour <input type="checkbox"/> 96 Hour <input type="checkbox"/> 1 Week <input type="checkbox"/> 2 Week			
*For TEM Air 3 hours/6 hours, please call ahead to schedule. *There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.			
<b>PCM - Air</b> <input checked="" type="checkbox"/> NIOSH 7400 <input type="checkbox"/> w/ OSHA 8hr. TWA <b>PLM - Bulk (reporting limit)</b> <input type="checkbox"/> PLM EPA 600/R-93/116 (<1%) <input type="checkbox"/> PLM EPA NOB (<1%) Point Count <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) Point Count w/Gravimetric <input type="checkbox"/> 400 (<0.25%) <input type="checkbox"/> 1000 (<0.1%) <input type="checkbox"/> NYS 198.1 (friable in NY) <input type="checkbox"/> NYS 198.6 NOB (non-friable-NY) <input type="checkbox"/> NIOSH 9002 (<1%)		<b>TEM - Air</b> <input type="checkbox"/> 4-4.5hr TAT (AHERA only) <input type="checkbox"/> AHERA 40 CFR, Part 763 <input type="checkbox"/> NIOSH 7402 <input type="checkbox"/> EPA Level II <input type="checkbox"/> ISO 10312 <b>TEM - Bulk</b> <input type="checkbox"/> TEM EPA NOB <input type="checkbox"/> NYS NOB 198.4 (non-friable-NY) <input type="checkbox"/> Chatfield SOP <input type="checkbox"/> TEM Mass Analysis-EPA 600 sec. 2.5 <b>TEM - Water:</b> EPA 100.2 Fibers >10µm <input type="checkbox"/> Waste <input type="checkbox"/> Drinking All Fiber Sizes <input type="checkbox"/> Waste <input type="checkbox"/> Drinking	
		<b>TEM - Dust</b> <input type="checkbox"/> Microvac - ASTM D 5755 <input type="checkbox"/> Wipe - ASTM D6480 <input type="checkbox"/> Carpet Sonication (EPA 600/J-93/167) <b>Soil/Rock/Vermiculite</b> <input type="checkbox"/> PLM CARB 435 - A (0.25% sensitivity) <input type="checkbox"/> PLM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - B (0.1% sensitivity) <input type="checkbox"/> TEM CARB 435 - C (0.01% sensitivity) <input type="checkbox"/> EPA Protocol (Semi-Quantitative) <input type="checkbox"/> EPA Protocol (Quantitative) <b>Other:</b>	
<input type="checkbox"/> Check For Positive Stop - Clearly Identify Homogeneous Group			
Samplers Name: <u>Juan Rodriguez</u>		Samplers Signature: <u>[Signature]</u>	
Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
JR-02-01-03	Penn House - Locker E	1200	2/1/12
JR-02-01-04	Penn House - AHU #3		
JR-02-01-05	Penn House - B7-F-29.3 Doors		
JR-02-01-06	Penn House - Air Shaft F-272		
JR-02-01-07	Penn House - Air Shaft F-27-6		
JR-02-01-08	Penn House AHU #4		
JR-02-01-09	Penn House BX-173		
JR-02-01-10	Penn House AHU #11		
Client Sample #(s):		Total # of Samples:	
Relinquished (Client): <u>GSA</u>	Date: <u>2/1/12</u>	Time:	
Received (Lab): <u>ECW Walker</u>	Date: <u>2/2/12</u>	Time: <u>10:20 AM</u>	
Comments/Special Instructions:			



**EMSL Order Number** (*Lab Use Only*):

PHONE: (301) 937-5700  
FAX: (301) 937-5701

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
JR-02-01-11	Pawn House - F-27-1	1200	2/1/12
JR-02-01-12	B-2 - Tank Room.		
JR-02-01-13	B-2 CHiller #2		
JR-02-01-14	B-2 . Locker room.		
JR-02-01-15	B-2 - Supervisor Hallway		
JR-02-01-16	B-2 . Garage water treatment		
JR-02-01-17	B-2 - Garage shop storage		

\*Comments/Special Instructions: